TC169(PTV)
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THOMSON CONSUMER ELECTRONICS

CTC169(PTV)
(Second Edition)

Color Television Basic Service Data

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SAFETY NOTICE

USE ISOLATION TRANSFORMER WHEN SERVICING

nponents having special safety characteristics are identified by stars ★ on schematics in this Service Data and its bulletins. Before servicing strument, it is important that the service technician read and follow the "Safety Precautions" and "Product Safety Notices" in the Basic Service

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SAFETY PRECAUTIONS

DO NOT OPERATE THIS INSTRUMENT OR PERMIT IT TO BE OPERATED WITHOUT ALL PROTECTIVE DEVICES INSTALLED AND FUNCTIONING. SERVICERS WHO DEFEAT SAFETY FEATURES OR FAIL TO PERFORM SAFETY CHECKS MAY BE LIABLE FOR ANY RESULTING DAMAGE, AND MAY EXPOSE THEMSELVES AND OTHERS TO POSSIBLE INJURY.

READ AND COMPLY WITH ALL CAUTION AND SAFETY-RELATED NOTES ON OR INSIDE THE RECEIVER CABINET, AND THE RECEIVER CHASSIS, OR ON THE PICTURE TUBE.

SAFETY GLASSES SHOULD BE USED WHEN SERVICING ELECTRONIC INSTRUMENTS. INADVERTENTLY OVERSTRESSING COMPONENTS MAY CAUSE THEM TO SHATTER, DISCHARGING SMALL PARTICLES.

DESIGN ALTERATION WARNING - Do not alter or add to the mechanical or electrical design of this TV receiver. Design alterations and additions may alter the safety characteristics of this receiver and create a hazard to the user. Design alterations or additions may void the manufacturer's warranty and may make you, the servicer, responsible for personal injury or property damage resulting therefrom.

BEFORE RETURNING AN INSTRUMENT TO THE CUSTOMER, always make a safety check of the entire instrument, including, but not limited to, the following items:

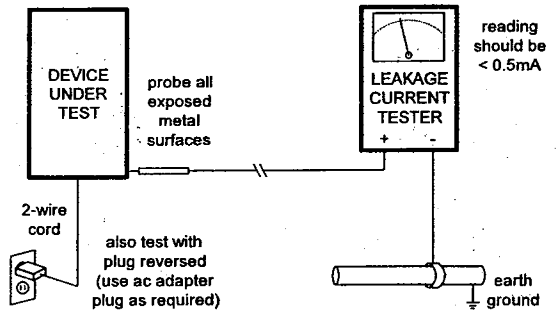
FIRE AND SHOCK HAZARD

1. Never release a repaired unit unless all protective devices such as insulators, barriers, covers, strain reliefs and other protective hardware have been installed in accordance with the original design.
2. Be sure that there are no cabinet openings through which an adult or a child might be able to insert their fingers and contact a hazardous voltage. Such openings include, but are not limited to: (a) spacings between picture tube and cabinet mask, (b) excessively wide cabinet ventilation slots, and (c) an improperly fitted or incorrectly secured back cover.
3. Observe original lead dress. Take care to restore leads to their original dress. Make sure that leads are not in contact with sharp edges or thermally hot parts. Always inspect in all areas for pinched, out-of-place or frayed wiring. Do not change spacing between adjacent components, or between components and printed-circuit board. Check AC power cord for damage.
4. Be certain to remove loose solder balls and all other loose foreign particles.
5. Check components, parts and/or wiring for physical evidence of damage, overheating or deterioration, and replace if necessary. Determine the cause of damage and/or overheating and, if necessary, take corrective action to remove any potential safety hazard.
6. Parts Replacement - Many TV electrical and mechanical parts have special safety-related characteristics, some of which are often not evident from visual inspection, and the protection they give cannot necessarily be obtained by replacing them with components rated for higher voltage, wattage, etc. Parts that have special safety characteristics are identified in this service data by a (⚠ or ★) on schematics and in the parts list. Use of a substitute replacement that does not have the same safety characteristics as the recommended replacement part in the service data parts list may create shock, fire and/or other hazards. Always consult the appropriate current service literature for the latest information.
7. Some TV receiver chassis' normally have 85VAC (RMS) between chassis and earth ground, regardless of the AC plug polarity. Some TV receiver chassis' are electrically connected directly to one conductor of the AC power cord. Some TV receiver chassis' have a secondary ground system in addition to the main chassis ground. This secondary ground system is not isolated from the AC power line. The two ground systems are electrically separated by insulating material that must not be defeated or altered. Thus, when servicing any unit always use a separate isolation transformer for the chassis. Failure to use a separate isolation transformer may expose the servicer to possible shock hazard, and may cause damage to servicing instruments.
8. Many electronic products use a polarized AC line cord (one wide pin on the plug). Defeating this safety feature may create a potential hazard to the servicer and the user. Extension cords which do not incorporate the polarizing feature should never be used.

PICTURE TUBE IMPLOSION WARNING - The picture tube in this receiver employs integral implosion protection. For continued implosion protection, replace the picture tube only with one of the same type number. Do not remove, install, or otherwise handle the picture tube in any manner without first putting on shatterproof goggles equipped with side shields. People not so equipped must be kept safely away while picture tubes are handled. Keep the picture tube away from your body. Do not handle the picture tube by its neck. Some "in-line" picture tubes are equipped with a permanently attached deflection yoke; because of potential hazard, do not try to remove such "permanently attached" yokes from the picture tube.

X-RADIATION AND HIGH VOLTAGE LIMITS - Because the picture tube is the primary source of X-radiation in solid-state TV receivers, it is specially constructed to prohibit X-radiation emissions. For continued X-radiation protection, a replacement picture tube must be the same type as the original. The picture shields, mounting hardware and lenses (projection TV) may also perform an X-radiation protection function, and they must be correctly in place. Anode connectors contain an X-radiation shield - use only the manufacturer's specified anode connectors. High voltage must be measured each time servicing that involves power supply, horizontal deflection or high voltage circuits is performed. Correct operation of the X-radiation circuits must also be confirmed each time these circuits are serviced (X-radiation circuits may also be called "horizontal disable" or "hold-down" circuits). Read and apply high voltage limits and, if the chassis is so equipped, the X-radiation protection circuit specifications. These limits and specifications are given on instrument labels and are included in this service data. High voltage is maintained within specified limits by close-tolerance safety-related components (and adjustments) in the high voltage circuit. If high voltage exceeds specified limits, check each component specified (by a star) on the schematic and take corrective action.

ANTENNA LEAKAGE RESISTANCE CHECK - With the instrument AC plug removed from the AC source, connect an electrical jumper across the two AC plug prongs. Place the instrument AC switch (if applicable) in the "on" position. Connect one lead of an ohmmeter to the AC plug prongs and touch the other ohmmeter lead, in turn, to each (exposed) antenna input terminal screw and/or coaxial connector. If the measured resistance is less than 1.0 Megohm, or greater than 5.2 Megohm, an abnormality exists which must be corrected before the instrument is returned to the customer. Repeat this test with the AC switch in the "off" position.


DEVICE UNDER TEST
probe all exposed metal surfaces
LEAKAGE CURRENT TESTER
+
-
reading should be < 0.5mA
2-wire cord
also test with plug reversed (use ac adapter plug as required)
earth ground

LEAKAGE CURRENT HOT CHECK FOR 2-WIRE OR 3-WIRE GROUNDED CORD SETS - With the instrument completely reassembled, plug the AC line cord into the mains AC outlet at normal line voltage via a non-polarized adapter. DO NOT GROUND THE 3RD PRONG OF THE ADAPTER AND DO NOT USE AN ISOLATION TRANSFORMER. Use a leakage current tester or metering system that complies with American National Standards Institute (ANSI) *C101.1 Leakage Current for Appliances* and with Underwriters Laboratories (UL) *1492 (Section 67)*. With the instrument AC switch first in the "on" position and then in the "off" position, measure from a known earth ground (metal water pipe, conduit, etc.) to all exposed metal parts of the instrument (antennas, handle bracket, metal cabinet, screwheads, metallic overlays, control shafts, etc.). Any current measured must not exceed 0.5 milliampere. Reverse the adapter plug in the outlet and repeat the test. **ANY MEASUREMENTS NOT WITHIN THE LIMITS SPECIFIED HEREIN INDICATE A POTENTIAL SHOCK HAZARD THAT MUST BE ELIMINATED BEFORE RETURNING THE INSTRUMENT TO THE CUSTOMER OR BEFORE CONNECTING THE ANTENNA OR ACCESSORIES.** If a leakage current tester is not available, connect a 1.5 Kohm, 10 Watt resistor, in parallel with a 0.15μF, 150V capacitor, between earth ground and each exposed metal part of the instrument (as shown above). Use an AC voltmeter with at least 5000 ohm/volt sensitivity to measure the potential across the resistor. The potential measured for any exposed metal surface must not exceed 0.75 volts.

SPECIFICATIONS

Power Consumption:	240 watts
Antenna Impedance:	
ANT A	75 ohms unbalanced
ANT B	75 ohms unbalanced
CONVERTER	75 ohms unbalanced
Channels Received:	
Off-Air VHF	2 thru 13
Off-Air UHF	14 thru 69
Cable-Low VHF	4A (1)
Cable-Low Midband	A-2 (98), A-1 (99)
Cable-Midband	A thru I (14 thru 22)
Cable-Superband	J thru W (23 thru 36)
Cable-Hyperband	W+1 thru W+28 (37 thru 64)
Cable-Ultraband	W+29 thru W+53 (65 thru 89) W+54 thru W+56 (126 thru 128) W+57 (93), W+58 (94) W+59 thru W+84 (100 thru 125)
IF Frequencies:	
Pix Carrier	45.75MHz
Sound Carrier	41.25MHz
Color Subcarrier	42.17MHz

Specifications subject to change without notice.

Screen Size:	
46GW950	46 inch diagonal
P46100TN	46 inch diagonal
P46150WK	46 inch diagonal
P52150WK	52 inch diagonal
Video Inputs:	
INPUT 1	1Vp-p at 75 ohms
INPUT 2	1Vp-p at 75 ohms
S-VIDEO	1Vp-p at 75 ohms
Video Outputs:	
SELECT OUT	1Vp-p into 75 ohms
Audio Inputs:	
INPUT 1	400mVRMS >10K input impedance
INPUT 2	400mVRMS >10K input impedance
Audio Outputs:	
HI-FI OUT	400mVRMS <2K output impedance
SELECT OUT	variable level 2VRMS maximum 400mVRMS at nom. volume setting
EXTERNAL SPEAKERS	10W/ch. RMS into 8 ohms 50-20,000 Hz, <1.5% THD

INSTALLATION

The upper backcover (which holds the mirror assembly) is placed in a shipping position at the factory and must be properly positioned for in-home use. If not properly positioned, the raster will be distorted and convergence will appear to be misadjusted. Refer to the label on the upper backcover for assembly instructions.

CLEANING

Screen

Use a soft, clean cloth moistened in water only. Wipe the front of the screen in a up/down motion, following the vertical black stripes. Wipe the rear of the screen in a circular motion, following the concentric circles of the fresnel lens. If the screen cannot be cleaned with water, use a neutral detergent cleanser (less than 20% concentration).

Picture Tube Lenses

Clean the faces of the picture tube lenses with a soft cloth and a small amount of liquid glass cleaner or anti-static cleaner (stock no. AH035).

Mirror Assembly

To clean the mirror, use a non-abrasive, neutral detergent cleanser (less than 20% concentration). Wipe with a soft, clean cloth; do not apply excessive pressure.

To reduce scratches on the mirror surface, use a small amount of carnauba wax. Wipe with a soft, clean cloth; do not apply excessive pressure.

SERVICING PRECAUTIONS

Due to differences in picture tube design, projection television instruments present the servicer with safety concerns that do not apply to standard direct-view instruments. The following procedures **must** be observed when servicing the instrument:

1. The picture tube lens assemblies provide shielding to prevent exposure to x-ray emissions. DO NOT OPERATE THE INSTRUMENT WITH ONE OR MORE LENS ASSEMBLIES REMOVED.
2. The picture tube anode cups provide shielding to prevent exposure to x-ray emissions, and are not meant to be replaced by the servicer. DO NOT REMOVE THE ANODE CUP FROM THE PICTURE TUBE ASSEMBLY. Replacement part picture tube assemblies include an anode lead.
3. The **High Voltage Check** procedure (see **SERVICE ADJUSTMENTS**) must be performed prior to any servicing procedure to assure that the x-ray protection circuit is operating properly.

COMPONENT NUMBERING SYSTEM

Serviceability of this chassis is enhanced by prominent roadmapping on the top and bottom of the circuit boards. The component numbering system relates to general circuit areas as follows:

0000 Series - External Speaker Jack
1000 Series - Luma/Chroma/Deflection (1-chip)
1100 Series - Audio DNR
1200 Series - Audio FM Detector
1400 Series - Video Input Switching/Hi-Fi Audio Output
1600 Series - Digital Audio Processing
1900 Series - Audio Output
2300 Series - Audio/Video IF
2600 Series - Analog Comb Filter
2700 Series - Luminance Processing
2800 Series - Chrominance Processing
2900 Series - RGB Bias/Drive and OSD
3100 Series - System Control:
Keyboard/IR Input
Chassis Interface
3200 Series - System Control:
Digital Memory
3300 Series - System Control:
Tuning Control
Chassis Interface
3400 Series - Front Panel Switching/IR Preamp
3600 Series - Tuner Interface
4000 Series - AC Input
4100 Series - Power Supply Regulator
4200 Series - Degaussing
4300 Series - Horizontal Oscillator/On-Off Switching
4400 Series - Horizontal Output
4500 Series - Vertical Deflection
4600 Series - Standby Supplies
4700 Series - Secondary Supplies
4800 Series - Pincushion
4900 Series - X-Ray Shutdown
5000 Series - Kine Driver
6400 Series - Digital Comb Filter, PIP Adapter
7000 Series - PTV Auxiliary Circuits:
Aux Power Supply
Convergence Output Drivers
Dynamic Focus
Scan Loss Protection
7100 Series - PTV Auxiliary Circuits:
Aux Power Supply
Convergence Output Drivers
Dynamic Focus
Scan Loss Protection
7200 Series - PTV Auxiliary Circuits:
Convergence Output Drivers
8000 Series - Pix-In-Pix (S-PIP)
8100 Series - Convergence Generator, S-PIP
8200 Series - Convergence Generator, S-PIP
8300 Series - Convergence Generator, S-PIP
8400 Series - Convergence Generator, S-PIP
8500 Series - S-PIP
8900 Series - S-PIP Micro

MODEL-TO-MAJOR ASSEMBLY CROSS REFERENCE

KEY TO MAJOR ASSEMBLIES

C1- 10W Analog Audio (2F26017-513)
C2- 10W Analog Audio (2F26017-518)
C3- 10W Analog Audio (2F26020-511)
C4- 10W Analog Audio (2F26020-513)
C5- 10W Analog Audio (2F35039-511)
C6- 10W Analog Audio (2F35039-513)
C7- 5W Analog Audio (2F35044-511)
C8- 5W Analog Audio (2F35046-511)
C9- 5W analog Audio (2F35046-514)
C10- Audio Crossover (2F26003-501)
C11- Audio Crossover (2F26003-508)
C12- Audio DNR (2F26007-501)
C13- Audio TVB (2F26013-501)
C14- Black Stretch (2F25006-503)
C15- Black Stretch (2F25006-504)
C16- Black Stretch (2F25006-513)
C17- Black Stretch (2F25006-514)
C18- Black Stretch (2F25006-516)
C19- Black Stretch (2F25006-520)
C20- Black Stretch (2F25006-521)
C21- Convergence (2F45001-501)
C22- Convergence (2F45009-501)
C23- CRT Driver (2F30008-501)
C23a- CRT Driver (2F30008-502)
C24- D-PIP (2F43004-501)
C25- Digital Audio (2F35023-525)
C26- Digital Audio (2F35023-575)
C27- Digital Comb (2F35019-504)
C28- Ext Speaker (2F26005-504)
C29- Ext Speaker (2F26005-505)
C30- Ext Speaker (2F27004-502)
C31- Front Panel (2F42008-501)
C32- Front Panel (2F42009-502)
C33- Front Panel (2F42015-501)
C34- Front Panel (2F42018-501)
C35- HV Regulator HV Regulator (2F47001--501)
C36- HV Splitter (2F25001-501)
C37- Pincusion (2F40011-501)
C38- PIP Adaptor (2F25002-501)
C39- PIP Adaptor (2F25002-502)
C40- Preamp (2F34003-501)
C41- Preamp (2F34006-501)
C42- PTV Adapter (2F25011-501)
C43- PTV Amplifier (2F27039-501)
C44- PTV Auxiliary (2F27009-501)
C45- PTV Power Supply (2F33013-501)
C46- S-PIP (2F43005-501)
C47- S-PIP (2F43005-502)
C48- S-PIP (2F43005-511)
C49- S-PIP Micro (2F35033-501)
C50- S-PIP Micro (2F35033-502)
C51- SRS Audio (2F26009-502)
C52- SRS Audio (2F26009-503)
C53- Surround Sound (2F26018-503)
C54- Crossover (2F26019-502)

R1- Remote (CRK59A)
R2- Remote (CRK59B)
R3- Remote (CRK59C)
R4- Remote (CRK59G)
R5- Remote (CRK59K)
R6- Remote (CRK60A)
R7- Remote (CRK61A)
R8- Remote (CRK62A)
R9- Remote (CRK62B)
R10- Remote (CRK62D)
R11- Remote (CRK62K)
R12- Remote (CRK70D)
R13- Remote (CRK70G)
R14- Remote (CRK74F)
R15- Remote (CRK74H)
R16- Remote (CRK83D)
R17- Remote (CRK84C)
T1- Tuner (MTP-M-2030)

MODEL/ SERVICE NO.	CHASSIS CTC	CHASSIS FAMILY	MAJOR ASSEMBLIES
46GW939DX1	169PB	3	C8,C16,C21,C23,C29,C32, C35,C36,C40,C44,R3,T1
46GW940CG1	169PV	2	C7,C16,C21,C23,C29,C32, C35,C36,C40,44,R3,T1
46GW943LG1	169PF	4	C8,C20,C22,C23,C24, C29,C34C35,C36,C37,C41, C42,C43,C45,R17,T1
46GW944DX2	169PK	4	C8,C20,C22,C23A,C24, C29,C34,C37,C41,C42,C43 C45,R17
46GW944LG1	169PF	4	C8,C20,C22,C23,C24,C29 C34C35,C36,C37,C41,C42, C43,C45,R17,T1
46GW944LG2	169PK	4	C8,C20,C22,C23A,C24, C29,C34,C37,C41,C42,C43 C45,R14
46GW950NO1	169BL	1	C12,C21,C23,C25,C27, C30,C31,C35,C36,C44, R3,T1
46GW950NO2	169BN	1	C12,C21,C23,C25,C30, C31, C35,C36,C39,C44, R3,T1
46GW950NO3	169HN	1	C13,C21,C23,C26,C30, C31,C35,C36,C39,C44, R3,T1
46GW951CG1	169BU	2	C5,C10,C14,C21,C23, C29,C32,C35,C36,C40, C44,R3,T1
46GW951CG1	169PU	2	C3,C10,C16,C21,C23, C29,C32,C35,C36,C40, C44,R3,T1
49GW952CG1	169BW	2	C5,C10,C15,C21,C23, C29,C32,C35,C36,C40, C44,C48,C50,R4,T1
	169PW	2	C3,C10,C17,C21,C23, C29,C32,C35,C36,C40, C44,C48,C50,R4,T1
49GW952DG1	169BW	2	C5,C10,C15,C21,C23, C29,C32,C35,C36,C40, C44,C48,C50,R4,T1
	169PW	2	C3,C10,C17,C21,C23, C29,C32,C35,C36,C40, C44,C48,C50,R4,T1

MODEL-TO-MAJOR ASSEMBLY CROSS REFERENCE (Continued)

MODEL/ SERVICE NO.	CHASSIS CTC	CHASSIS FAMILY	MAJOR ASSEMBLIES
M46GE944EG1	169PF	4	C8,C20,C22,C23,C24,C29,C34,C35,C36,C37,C41,C42,C43,C45,R17,T1
M52732EG1	169PG	4	C8,C20,C22,C23A,C24,C29,C34,C37,C41,C42,C43 C45,R12
P46100TNDO1	169BN	1	C12,C21,C23,C25,C30,C31,C35,C36,C39,C44,R2,T1
P46100TNDO3	169HN	1	C13,C21,C23,C26,C30,C31,C35,C36,C39,C44,R2,T1
P46100TNNO1	169BL	1	C12,C21,C23,C25,C27,C30, C31,C35,C36,C44,R2,T1
P46100TNNO2	169BN	1	C12,C21,C23,C25,C30,C31,C35,C39,C44,R2,T1
P46100TNNO3	169HN	1	C13,C21,C23,C26,C30,C31,C35,C36,C39,C44,R2,T1
P46101WKCG1	169BU	2	C5,C10,C14,C21,C23,C29,C32,C35,C36,C40,C44,R2,T1
	169PU	2	C3,C10,C16,C21,C23,C29,C32,C35,C36,C40,C44,R2,T1
P46101WKDG1	169BU	2	C5,C10,C14,C21,C23,C29,C32,C35,C36,C40,C44,R2,T1
	169PU	2	C3,C10,C16,C21,C23,C29,C32,C35,C36,C40,C44,R2,T1
P46130WKCG1	169PX	2	C7,C18,C21,C23,C24,C29,C32,C35,C36,C40,C44,R1,T1
P46130WKDG1	169PX	2	C7,C18,C21,C23,C24,C29,C32,C35,C36,C40,C44,R1,T1
P46150WKNO1	169BM	1	C12,C21,C23,C25,C30,C31,C35,C36,C38,C44,C46,C49,R1,T1
P46150WKNO2	169HM	1	C13,C21,C23,C26,C30,C31,C35,C36,C38,C44,C46,C49,R1,T1
P46151WKCG1	169BT	2	C6,C10,C15,C21,C23,C29,C32,C35,C36,C40,C44,C47,C50,C51,R8,T1
	169PT	2	C4,C10,C17,C21,C23,C29,C32,C35,C36,C40,C44,C48,C50,C51,R8,T1
P46151WKCG2	169PT	2	C4,C10,C17,C21,C23,C29,C32,C35,C36,C40,C44,C48,C50,C51,R8,T1
P46151WKDG1	169PT	2	C6,C10,C15,C21,C23,C29,C32,C35,C36,C40,C44,C47,C50,C51,R8,T1
	169PT	2	C4,C10,C17,C21,C23,C29,C32,C35,C36,C40,C44,C48,C50,C51,R8,T1
P46151WKDG1	169PT	2	C4,C10,CC17,C21,C23,C29,C32,C35,C36,C40,C44,C48,C50,C51,R8,T1
P46159WKCG1	169BT	2	C6,C10,C15,C21,C23,C29,C32,C35,C36,C40,C44,C47,C50,C51,R8,T1
P46159WKDG1	169BT	2	C6,C10,C15,C21,C23,C29,C32,C35,C36,C40,C44,C47,C50,C51,R8,T1
P46160WKCG1	169PT	2	C4,C10,C17,C21,C23,C29,C32,C35,C36,C40,C44,C48,C50,C51,R8,T1
P46160WKDG1	169PT	2	C4,C10,C17,C21,C23,C29,C32,C35,C36,C40,C44,C48,C50,C51,R8,T1
P46720BADX1	169PF	4	C8,C20,C22,C23,C24,C29 C34,C35,C36,C37,C41,C42 C43,C45,R14,T1
P46720BADX2	169PK	4	C8,C20,C22,C23A,C24,C29,C34,C37,C41,C42,C43 C45,R14
P46720BALG1	169PF	4	C8,C20,C22,C23,C24,C29 C34,C35,C36,C37,C41,C42 C43,C45,R14,T1
P46720BALG2	169PK	4	C8,C20,C22,C23A,C24,C29,C34,C37,C41,C42,C43 C45,R14
P46720LVLG1	169PF	4	C8,C20,C22,C23,C24,C29 C34,C35,C36,C37,C41,C42 C43,C45,R14,T1
P46720LVLG2	169PK	4	C8,C20,C22,C23A,C24,C29,C34,C37,C41,C42,C43 C45,R14
P46721BADX1	169PF	4	C8,C20,C22,C23,C24,C29 C34,C35,C36,C37,C41,C42 C43,C45,R14,T1
P46721BADX2	169PK	4	C8,C20,C22,C23A,C24,C29,C34,C37,C41,C42,C43 C45,R14
P46721LVLG1	169PF	4	C8,C20,C22,C23,C24,C29 C34,C35,C36,C37,C41,C42 C43,C45,R14,T1
P46721LVLG2	169PK	4	C8,C20,C22,C23A,C24,C29,C34,C37,C41,C42,C43 C45,R14
P46725SKLG1	169PF	4	C8,C20,C22,C23,C24,C29 C34C35,C36,C37,C41,C42,C43,C45,R14,T1
P46726BADX1	169PF	4	C8,C20,C22,C23,C24,C29 C34C35,C36,C37,C41,C42,C43,C45,R14,T1
P46727BADX1	169PB	4	C8,C16,C21,C23,C29,C32,C35,C36,C40,C44,R6,T1
P46728WKLG1	169PC	3	C9,C18,C21,C23,C24,C29,C32,C35,C36,C40,C44,C52,R9, T1
P46729BADX1	169PC	3	C9,C18,C21,C23,C24,C29,C32,C35,C36,C40,C44,C52,R9, T1

MODEL-TO-MAJOR ASSEMBLY CROSS REFERENCE (Continued)

MODEL/ SERVICE NO.	CHASSIS CTC	CHASSIS FAMILY	MAJOR ASSEMBLIES
P46729BALG1	169PC	3	C9,C18,C21,C23,C24, C29,C32,C35,C36,C40, C44,C52,R9, T1
P46730WKLG1	169PC	3	C9,C18,C21,C23,C24, C29,C32,C35,C36,C40, C44,C52,R9, T1
P46731ATDX1	169PG	4	C9,C20,C22,C23,C24, C29,C34,C35,C36,C37, C41,C42,C43,C45,C52, R9,T1
P46731ATLG1	169PG	4	C9,C20,C22,C23,C24, C29,C34,C35,C36,C37, C41,C42,C43,C45,C52, R9,T1
P46732BADX1	169PG	4	C9,C20,C22,C23,C24, C29,C34,C35,C36,C37, C41,C42,C43,C45,C52, R9,T1
P46732BALG1	169PG	4	C9,C20,C22,C23,C24, C29,C34,C35,C36,C37, C41,C42,C43,C45,C52, R9,T1
P46738ATLG1	169PG	4	C9,C20,C22,C23,C24, C29,C34,C35,C36,C37, C41,C42,C43,C45,C52, R9,T1
P46770CKDX1	169PA	3	C4,C11,C17,C21,C23, C29,C33,C35,C36,C40, C44,C48,C50,C51,R8,T1
P46770CKLG1	169PA	3	C4,C11,C17,C21,C23, C29,C33,C35,C36,C4O, C44,C48,C50,C51,R8,T1
P52100EBLG1	169PE	4	C1,C19,C22,C23,C29, C34,C35,C36,C37,C41, C42,C43,C45,C50,C51, R8,T1
P52150CPDO1	169BM	1	C12,C21,C23,C25,C30, C31,C35,C36,C38,C44, C46,C49,R1, T1
P52150CPDO2	169HM	1	C13,C21,C23,C26,C30, C31,C35,C36,C38,C44, C46,C49,R1, T1
P52150CPNO1	169BM	1	C12,C21,C23,C25,C30, C31,C35,C36,C38,C44, C46,C49,R1, T1
P52150CPNO2	169HM	1	C13,C21,C23,C26,C30, C31,C35,C36,C38,C44, C46,C49,R1, T1
P52151WKCG1	169BT	2	C6,C10,C15,C21,C23, C29,C32,C35,C36,C40 C44,C47,C50,C51,P1, P2,P3,R8,T1
	169PT	2	C4,C10,C17,C21,C23, C29,C32,C35,C36,C40, C44,C48,C50,C51,R8,T1
P52151WKDG1	169BT	2	C6,C10,C15,C21,C23, C29,C32,C35,C36,C40, C44,C47,C50,C51,R8,T1
	169PT	2	C4,C10,C17,C21,C23, C29,C32,C35,C36,C40, C44,C48,C50,C51,R8,T1

MODEL/ SERVICE NO.	CHASSIS CTC	CHASSIS FAMILY	MAJOR ASSEMBLIES
P52152STCG1	169PT	2	C4,C11,C17,C21,C23, C29,C32,C35,C36,C40, C44,C48,C50,C51,R8,T1
P52152STDG1	169PT	2	C4,C11,C17,C21,C23, C29,C32,C35,C36,C40, C44,C48,C50,C51,R8,T1
P52720BADX1	169PF	4	C8,C20,C22,C23,C24,C29, C34,C35,C36,C37,C41,C42 C43,C45,R14,T1
P52720BADX2	169PK	4	C8,C20,C22,C23A,C24, C29,C34,C37,C41,C42,C43 C45,R14
P52720BALG1	169PF	4	C8,C20,C22,C23,C24,C29, C34,C35,C36,C37,C41,C42 C43,C45,R14,T1
P52720BALG2	169PK	4	C8,C20,C22,C23A,C24, C29,C34,C37,C41,C42,C43 C45,R14
P52720LVLG1	169PF	4	C8,C20,C22,C23,C24,C29, C34,C35,C36,C37,C41,C42 C43,C45,R14,T1
P52720LVLG2	169PK	4	C8,C20,C22,C23A,C24, C29,C34,C37,C41,C42,C43 C45,R14
P52721BADX1	169PF	4	C8,C20,C22,C23,C24,C29, C34,C35,C36,C37,C41,C42 C43,C45,R14,T1
P52721BADX2	169PK	4	C8,C20,C22,C23A,C24, C29,C34,C37,C41,C42,C43 C45,R14
P52721LVLG1	169PF	4	C8,C20,C22,C23,C24,C29, C34,C35,C36,C37,C41,C42 C43,C45,R14,T1
P52721LVLG2	169PK	4	C8,C20,C22,C23A,C24, C29,C34,C37,C41,C42,C43 C45,R14
P52730CKLG1	169PC	3	C9,C18,C21,C23,C24, C29,C33,C35,C36,C40, C44,C52,R9,T1
P52731WKLG1	169PG	4	C9,C20,C22,C23,C24, C29,C33,C35,C36,C37 C41,C42,C43,C45,C52, R9,T1
P52732BADX1	169PG	4	C9,C20,C22,C23,C24,C29, C34,C35,C36,C37,C41,C42, C43,C45,C52,R12,T1
P52732BALG1	169PG	4	C9,C20,C22,C23,C24,C29, C34,C35,C36,C37,C41,C42, C43,C45,C52,R12,T1
P52738WKLG1	169PG	4	C9,C20,C22,C23,C24,C29, C34,C35,C36,C37,C41,C42, C43,C45,C52,R12,T1
P52750WKLG1	169PA	3	C4,C10,C17,C21,C23, C29,C33,C35,C36,C40, C44,C48,C50,C51,P1, P2,P3,R8,T1
P52753ATLG1	169PE	4	C1,C10,C19,C22,C23, C29,C34,C35,C36,C37, C41,C42,C43,C45,C48, C50,C51,R8,T1

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MODEL-TO-MAJOR ASSEMBLY CROSS REFERENCE (Continued)

MODEL/ SERVICE NO.	CHASSIS CTC	CHASSIS FAMILY	MAJOR ASSEMBLIES
P52755STDX1	169PA	3	C4,C11,C17,C21,C23, C29,C32,C35,C36,C40, C44,C48,C50,C51,R8,T1
P52755STLG1	169PA	3	C4,C11,C17,C21,C23, C29,C32,C35,C36,C40, C44,C48,C50,C51,R8,T1
P52756SBDX1	169PE	4	C1,C10,C19,C22,C23, C29,C34,C35,C36,C37, C41,C42,C43,C45,C48, C50,C51,R8,T1
P52756SBDX2	169PE	4	C1,C19,C22,C23,C29,C34, C35,C36,C37,C41,C42,C43 C45,C48,C50,C51,R13,T1
P52756SBLG1	169PE	4	C1,C10,C19,C22,C23, C29,C34,C35,C36,C37, C41,C42,C43,C45,C48, C50,C51,R8,T1
P52756SBLG2	169PE	4	C1,C19,C22,C23,C29,C34, C35,C36,C37,C41,C42,C43 C45,C48,C50,C51,R13,T1
P52770EBDX2	169PA	4	C1,C17,C21,C23,C29,C33, C35,C36,C40,C44,C48,C50 C51,R8,T1
P52770EBDX1	169PA	3	C4,C10,C17,C21,C23, C29,C33,C35,C36,C40, C44,C48,C50,C51,R8,T1
P52770EBDX2	169PA	3	C4,C10,C17,C21,C23, C29,C33,C35,C36,C40, C44,C48,C50,C51,R8,T1
P52770EBLG1	169PA	3	C4,C10,C17,C21,C23, C29,C33,C35,C36,C40, C44,C48,C50,C51,R8,T1
P52770EBLG2	169PA	3	C4,C10,C17,C21,C23, C28,C33,C35,C36,C40, C44,C48,C50,C51,R8,T1
P56720LVLG2	169PM	4	C8,C20,C21,C23A,C24, C29,C34,C37,C41,C42,C43 C45,R14
P60100EBLG1	169PE	4	C1,C19,C22,C23,C29, C34,C35,C36,C37,C41, C42,C43,C45,C48,C50, C51,R8,T1

MODEL/ SERVICE NO.	CHASSIS CTC	CHASSIS FAMILY	MAJOR ASSEMBLIES
P60152CKCG1	169PT	2	C4,C11,C17,C21,C23, C29,C32,C35,C36,C40, C44,C48,C50,C51,R8,T1
P60153EBLG1	169PT	2	C4,C11,C17,C21,C23, C29,C32,C35,C36,C40, C44,C48,C50,C51,R8,T1
P60750CKLG1	169PA	3	C4,C11,C17,C21,C23, C29,C32,C35,C36,C40, C44,C48,C50,C51,R8,T1
P60751EBDX1	169PA	4	C1,C17,C21,C23,C29,C33, C35,C36,C40,C44,C48,C50, C51,R8,T1
P60751EBLG1	169PA	3	C4,C11,C17,C21,C23, C29,C32,C35,C36,C40, C44,C48,C50,C51,R8,T1
P60752EBDX1	169PE	4	C1,C10,C19,C22,C23, C29,C34,C35,C36,C37, C41,C42,C43,C45,C48, C50,C51,R8,T1
P60752EBLG1	169PE	4	C1,C10,C19,C22,C23, C29,C34,C35,C36,C37, C41,C42,C43,C45,C48, C50,C51,R8,T1
P60752EBLG2	169PJ	4	C1,C19,C22,C23A,C29, C34,C37,C41,C42,C43,C45 C48,C51,R13
PS52650DX1	169PH	4	C2,C19,C22,C23,C28,C34, C35,C36,C37,C41,C42,C43, C45,C48,R50,C53,C54,R7, R16,T1
PS52650LG1	169PH	4	C2,C19,C22,C23,C28,C34, C35,C36,C37,C41,C42,C43, C45,C48,R50,C53,C54,R7, R16,T1
PS52652DX1	169PD	4	C1,C17,C21,C23,C29,C33, C35,C36,C40,C44,C48,C50, C51,R6,R10,T1
PS52652LG1	169PD	3	C2,C11,C17,C21,C23, C28,C33,C35,C36,C40, C44,C48,C50,C53, R6,R10,T1

INSTRUMENT DISASSEMBLY

Speaker Grille Removal/Convergence Control Access

1a. Pull the lower edge of the speaker grille out and down to remove. (46GW940/950, P46100/150)

1b. Pull the metal tabs located along the upper edge of the speaker grille out to remove the grille. (P52150)

1c. Pull upper edge of speaker grille out and up to remove. (46GW951/952, P46101/130/151/159/160, P52151, P60152/153)

2. All convergence controls can be adjusted through the control panel using a standard alignment tool. Refer to the **Convergence Alignment** procedure in the **Alignment Procedures** section.

Screen Assembly Removal
(46GW950, P46100/150, P52150)

1. Identify the two metal retaining tabs (A), located along the bottom edge of the cabinet top rail (see Fig. 1a).
2. Insert a small flat-blade screwdriver between the screen and cabinet top rail to release the metal retaining tabs (see Fig. 2a).
3. Tilt the top edge of the screen out and lift to remove.

Screen Assembly Removal
(46GW940/951/952, P46101/130/151/159/160, P52151, P60152/153)

1a. Remove speaker grille (see procedure).

1b. To remove wooden rail at bottom edge of screen, grasp on both sides and pull out (P60152/153).

2. Loosen screws A and pull slide tab down (Fig. 1b.).
3. Pull screen out from bottom and drop down to remove.

Backcover Removal

1. Remove eight screws to release the backcover.
2. Lift the backcover up and out to remove.

Front Panel Circuit Board Removal
Button Assembly Removal
(46GW950, P46100/150, P52150)

1. Remove the screen assembly.
2. Remove four screws (A) to release the front panel assembly (see Fig. 1).

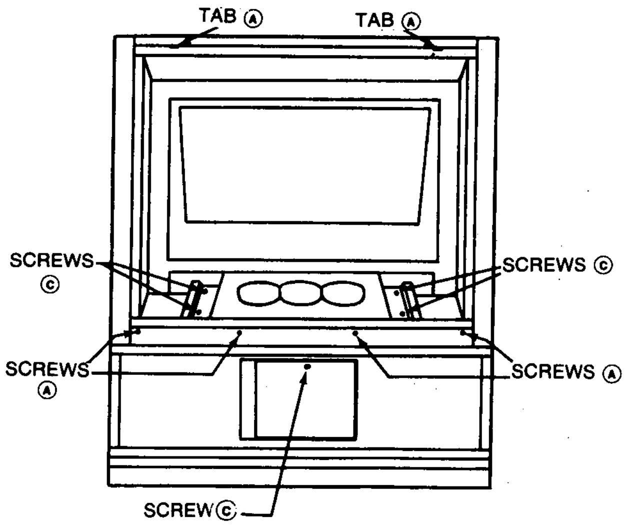

Fig. 1a - Cabinet Front View (Speaker Grille and Screen Removed) Models: 46GW950, P46100/150, P52150

3. Release six tabs to remove the keyboard retaining plate and release the Front Panel circuit board.
4. Release four tabs to remove the button assembly.
5. To replace the Front Panel circuit board, remove the backcover, slide the Main Circuit Board out slightly, and disconnect P3001 from the Main Circuit Board.

Front Panel Assembly Removal
(46GW951/952, P46101/151/159, P52151)

1. Remove Speaker Grille (see procedure).
2. Remove screen assembly (see procedure).
3. Remove two (2) screws B and remove FPA.

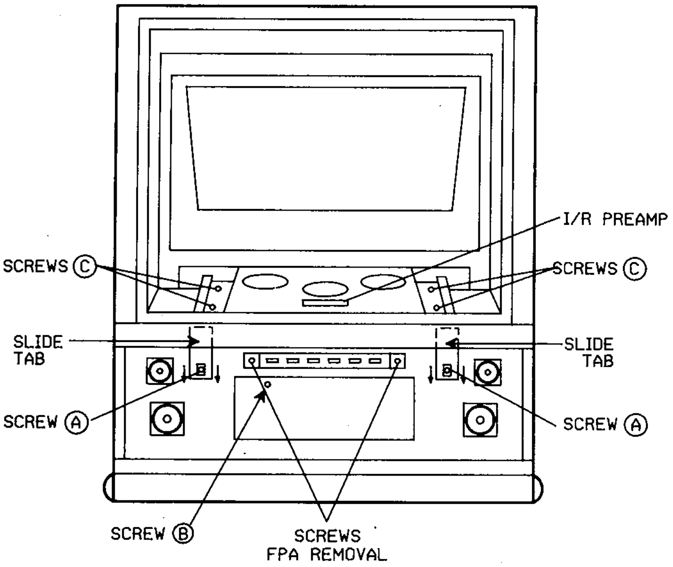

Fig. 1b - Cabinet Front View (Speaker Grill and Screen Removed) (46GW951/952, P46101/151/159, P52151)

Picture Tube Removal
Yoke Assembly Removal

1. Remove the backcover.
2. Disconnect the deflection yoke cable (P7009, P7010 or P7011, depending upon the picture tube being removed) from the PTV Auxiliary circuit board. Remove the yoke cable from the wire guide at the rear of the PTV Auxiliary circuit board.
3. Disconnect the convergence yoke cable (P7016, P7017 or P7018, depending upon the picture tube being removed) from the PTV Auxiliary circuit board. Remove the yoke cable from the wire guides along the side of the PTV Auxiliary circuit board.
4. Remove the speaker grille.
5. Remove one screw (B) to release the convergence control panel and gain access to the picture tubes and HV Splitter assembly (see Fig. 1).
6. Remove the deflection yoke cable and convergence yoke cable from the wire guide near the Kine Driver circuit board.
7. Disconnect the picture tube ground cable (P5002) from the Kine Driver circuit board.
8. Disconnect the anode lead and the picture tube ground lead from the HV Splitter assembly.

INSTRUMENT DISASSEMBLY (Continued)

Caution: The picture tube anode cups provide shielding to prevent exposure to x-ray emissions, and are not meant to be replaced by the servicer. DO NOT REMOVE THE ANODE CUP FROM THE PICTURE TUBE ASSEMBLY. Replacement part picture tube assemblies include an anode lead.

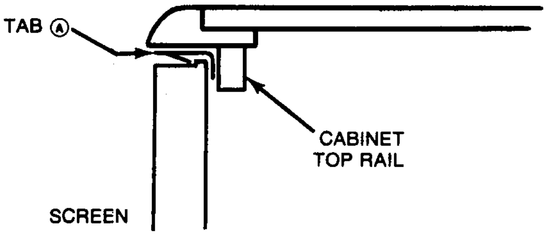

Fig. 2a - Cabinet Detail (Screen Removal) Models: 46GW950, P46100/150, P52150

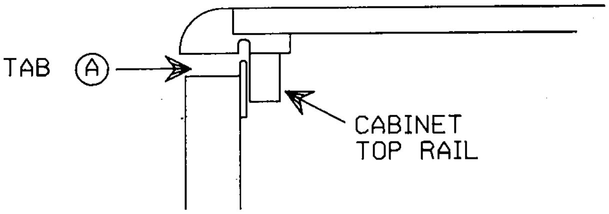

Fig. 2b - Cabinet Detail (Screen Removal) (46GW940/951/952, P46101/130/151/159/160, P52151, P60152/153)

Caution: To remove the anode lead, release the tab on the HV Splitter housing, then pull the lead and collar out of the HV Splitter housing. To reinstall the cable, first slide the collar into the HV Splitter housing until the first "click" is heard. Then insert the lead through the collar into the HV Splitter housing until the wire tie contacts the collar (see Fig. 3). Finally, slide the collar (and lead) into the HV Splitter housing until a second "click" is heard.

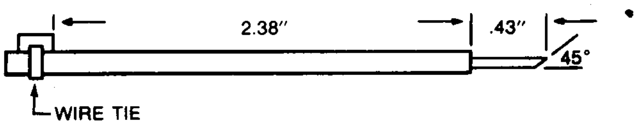

Fig. 3 - HV Cable Reassembly

9. Remove the screen assembly.
10. Remove four screws (C) to release the top lens barrier (see Fig. 1).
11. Remove four screws to release the picture tube/lens assembly from the optics frame.
12. Carefully lift the picture tube/lens assembly up and out of the cabinet.
13. Loosen the yoke clamp and carefully slide the yoke off of the picture tube neck.
14. Remove four Phillips-head screws to release the lens assembly from the picture tube assembly.

Chassis/Optics Kit Removal

1. Remove the screen assembly.
2. Release the Front Panel circuit board and rest it on the top lens barrier.
3. Remove the backcover.
4. Disconnect the speaker cable assembly (P1904) from the Digital Audio circuit board.

5a. Remove two screws (D) and two bolts (A) to release the cabinet back brace (see Fig. 4). (46″ models only)

5b. Remove six screws (D) to release the cabinet back brace (see Fig. 4). (52″ models)

6. Remove four screws (E) to release the chassis/optics kit (see Fig. 4).
7. Lift the rear edge of the chassis/optics kit slightly, then slide out to remove.

Convergence Control Panel Release
Convergence Generator Circuit Board Access/Removal

1. Remove the speaker grille.
2. Remove one screw (B) (see Fig. 1). Slide the convergence panel to the left and out to release.
3. Remove four screws to access the component side of the Convergence Generator circuit board.
4. Disconnect cable assemblies P8104, P8202 and P8203 from the Convergence Generator circuit board to remove.

Focus/Screen Assembly Removal

1. Remove the speaker grille.
2. Release the convergence control panel.
3. Disconnect the red, green and blue focus and screen cables and the dynamic focus cable from the Focus/Screen assembly.
4. Disconnect the ground lead from the Focus/Screen assembly.
5. Disconnect the HV focus cable from the HV Splitter assembly.

Caution: To remove the HV focus cable, release the tab on the HV Splitter housing, then pull the lead and collar out of the HV Splitter housing. To reinstall the cable, first slide the collar into the HV Splitter housing until the first "click" is heard. Then insert the lead through the collar into the HV Splitter housing until the wire tie contacts the collar (see Fig. 3). Finally, slide the collar (and lead) into the HV Splitter housing until a second "click" is heard.

6. Remove two screws to release the Focus/Screen assembly.

Kine Driver Circuit Board Removal

1. Remove the speaker grille.
2. Release the convergence control panel.
3. Carefully pull the Kine Driver circuit board off the picture tube and remove cable assemblies from wire guides as necessary to access both sides of the circuit board.
4. Disconnect cable assemblies P5001 and P5002 from the Kine Driver circuit board and disconnect the focus and screen cables from the Focus/Screen assembly to remove the circuit board.

INSTRUMENT DISASSEMBLY (Continued)

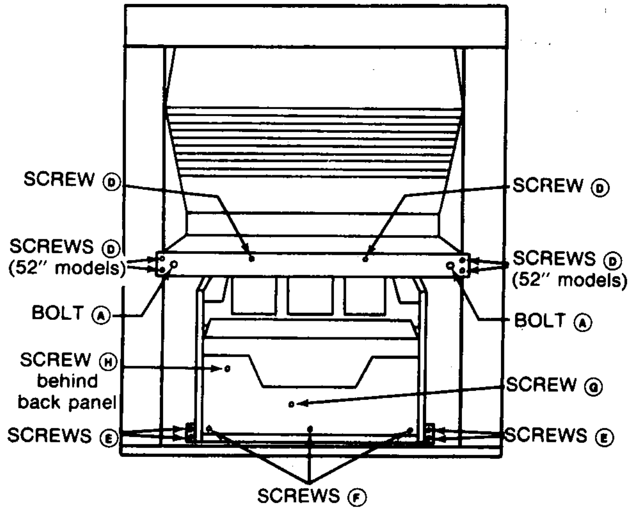

Fig. 4a - Cabinet Rear View (Backcover Removed) Models: 46GW950, P46100/150, P52150

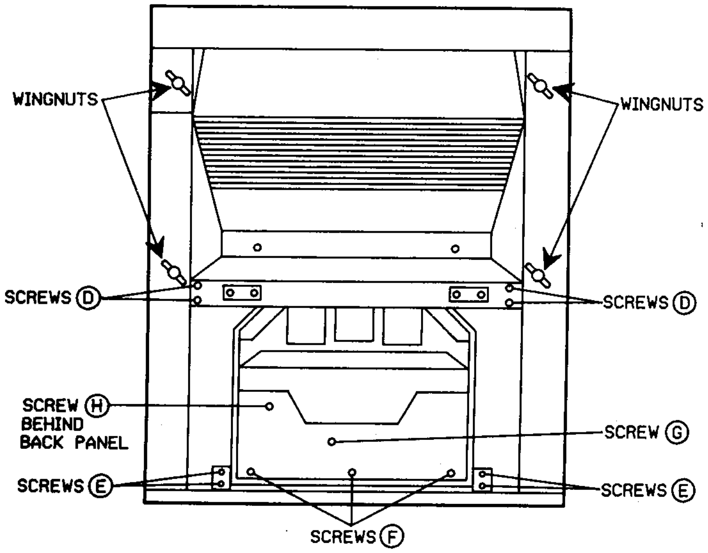

Fig. 4b - Cabinet Rear View (Back Cover Removed) (46GW940/951/952, P46101/130/151/159/160, P52151/152, P60152/153)

Lens Assembly Removal

1. Remove the screen assembly.
2. Remove the top lens barrier.
3. Remove four Phillips-head screws to release the lens assembly.

Yoke Assembly Removal

1. Remove the backcover.
2. Disconnect the deflection yoke cable (P7009, P7010 or P7011, depending upon the picture tube being removed) from the PTV Auxiliary circuit board. Remove the yoke cable from the wire guide at the rear of the PTV Auxiliary circuit board.
3. Disconnect the convergence yoke cable (P7016, P7017 or P7018, depending upon the picture tube being removed) from the PTV Auxiliary circuit board. Remove the yoke cable from the wire guides along the side of the PTV Auxiliary circuit board.
4. Remove the speaker grille.
5. Release the convergence control panel.
6. Remove the deflection yoke cable and convergence yoke cable from the wire guide near the Kine Driver circuit board.
7. Carefully pull the Kine Driver circuit board off the picture tube.
8. Loosen the yoke clamp and carefully slide the yoke off the picture tube neck.

HV Splitter Assembly Removal

1. Remove the speaker grille.
2. Release the convergence control panel.
3. Remove the screen assembly.
4. Remove the top lens barrier.
5. Disconnect the three picture tube anode leads, the HV focus cable and the chassis HV cable from the HV Splitter assembly.

Caution: To remove a HV cable, release the tab on the HV Splitter housing, then pull the lead and collar out of the HV Splitter housing. To reinstall the cable, first slide the collar into the HV Splitter housing until the first "click" is heard. Then insert the lead through the collar into the HV Splitter housing until the wire tie contacts the collar (see Fig. 3). Finally, slide the collar (and lead) into the HV Splitter housing until a second "click" is heard.

6. Disconnect the six ground leads from the HV Splitter assembly.
7. Disconnect cable assembly P4751 from the HV Splitter circuit board.
8. Remove two screws to release the HV Splitter assembly.

Chassis Rear Panel Removal

1. Remove the backcover.
2. Remove three screws (F) to release the chassis back panel from the PTV kit frame (see Fig. 4).
3. Remove one screw (G) to release the chassis rear panel from the AC Line Input assembly (see Fig. 4).
4. Slide the Main circuit board out (with the chassis rear panel) and remove one screw (H) to release the chassis rear panel from the External Speaker Jack assembly (see Fig. 4).

PTV Auxiliary Circuit Board Access/Removal

1. Remove the backcover.
2. Remove the chassis rear panel.
3. Remove cable assemblies from wire guides as necessary to allow the PTV Auxiliary circuit board to slide out of the chassis frame.
4. Tilt the rear edge of the PTV Auxiliary circuit board up to access the copper side of the board.
5. Disconnect cable assemblies P7001, P7005, P7006, P7007, P7009, P7010, P7011, P7012, P7013, P7014, P7015, P7016, P7017, P7018 and P7019 to remove the PTV Auxiliary circuit board.

INSTRUMENT DISASSEMBLY (Continued)

Main Circuit Board Service Position

1. Remove the backcover.
2. Remove the chassis rear panel.
3. Remove cable assemblies from the wire guides located on the chassis/optics barrier.
4. Remove four screws to release the chassis/optics barrier.
5. Remove cable assemblies from wire guides as necessary to allow the Main circuit board to slide out of the chassis frame.
6. Tilt the rear edge of the Main circuit board up to access the copper side of the board. Tilt the rear edge of the board down to access all areas of the component side of the board.

HV Regulator Circuit Board Access/Removal

1. Remove the backcover.
2. Remove the chassis rear panel.
3. Place the Main circuit board in the service position.
4. Release four tabs and tilt the HV Regulator circuit board to access the copper side of the board.
5. To remove the HV Regulator circuit board, disconnect cable assembly P4701 from the HV Regulator circuit board, disconnect four interconnect wires from the HV Regulator board and cut the HV return wire at the splice.

Caution: When replacing the HV Regulator circuit board (or T4751), be sure to add sleeving to the splice in the HV return wire.

Digital Audio Circuit Board Access/Removal

1. Remove the backcover.
2. Remove the chassis rear panel.
3. Place the Main circuit board in the service position (copper side up).
4. Twist one tab to release the audio heatsink from the Main circuit board.
5. Turn the Main circuit board over to access the component side of the board.

6a. Twist one tab to release the audio heatsink from the Digital Comb circuit board. (CTC169BL,BP)

6b. Twist one tab to release the audio heatsink from the PIP Adapter circuit board. (CTC169BM,BN)

7. Remove cable assembly P1903 from the wire tie located on the system control shield.
8. Remove the External Speaker Jack assembly wires from the wire ties located along the top edge of the Digital Audio circuit board.
9. Remove one screw to release the Digital Audio circuit board from the External Speaker Jack assembly.
10. Using a small pair of wire cutters, carefully cut the break-away sections along the bottom edge of the Digital Audio circuit board. Take care to avoid cutting the jumper wires which connect the Digital Audio circuit board to the Main circuit board.
11. Carefully tilt the Digital Audio circuit board out from the Main circuit board to gain access to all areas of the component side of the board.

Caution: Do not allow the audio heatsink to contact component leads on the copper side of the Digital Comb (or PIP Adapter) circuit board.

12. To remove the Digital Audio circuit board, disconnect cable assemblies J1903 and J1904 from the Digital Audio circuit board and unsolder the jumper wires at JS1900 from the Main circuit board.

Digital Comb Circuit Board Removal (CTC169BL,BP)

1. Remove the backcover.
2. Remove the chassis rear panel.
3. Place the Digital Audio circuit board in the service position.
4. Remove three screws to release the section of audio heatsink located behind the Digital Comb circuit board.
5. To remove the Digital Comb circuit board, disconnect cable assemblies P6401, P6402, P6403 and P6404 from the Digital Comb board and unsolder the jumper wires at JS6400 from the Main circuit board.

PIP Adapter Circuit Board Removal (CTC169BM,BN)

1. Remove the backcover.
2. Remove the chassis rear panel.
3. Place the Digital Audio circuit board in the service position.
4. Remove three screws to release the section of audio heatsink located behind the PIP Adapter circuit board.
5. To remove the PIP Adapter circuit board, disconnect cable assemblies P6401, P6402, P6403 and P6404 from the PIP Adapter board and unsolder the jumper wires at JS6400 from the Main circuit board.

Pix-In-Pix Module Removal (CTC169BM,BP)

1. Remove two screws holding the Pix-In-Pix module.
2. Disconnect cable assemblies P8001, P8002 and P8003 from the Pix-In-Pix module.

Speaker Removal

1. Remove the speaker grille.
2. Remove the speaker wires from the wire guides located just below the Convergence Control panel cutout.
3. Remove the backcover.
4. Remove four screws to release each speaker assembly.

INSTRUMENT DISASSEMBLY (Continued)

Screen Removal

Note: This procedure applies to the following models-

46GW940
46GW941
P46130
P46728
P46729
P46730
P46731
P46732
P46738
P52730
P52731
P52750
P52753
P52100*
P60100*

* In the wall units, omit Step 1.

1. Remove the grille cloth, pull away from the instrument to release from velcro.
2. Loosen both screws securing the screen holding brackets, slide the brackets down.
3. Pull the sceeen out at the bottom and let it slide down gently until there is enough space at the top to get hold of it.
4. Secure screen with both hands and remove.
5. To install the screen, make sure that the long side with slots is at the bottom. Reverse removal instructions.

Note: For access to convergence adjustment s follow Step 1.

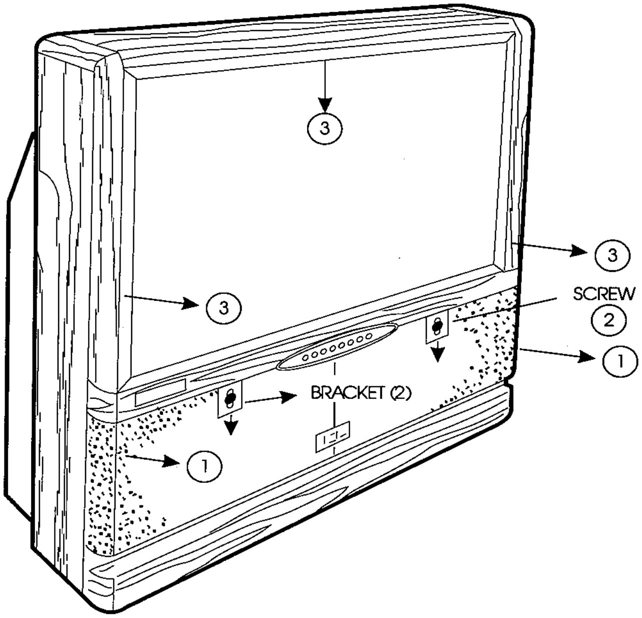

Fig. 6- Screen Removal multiple models.

Screen Removal

Note: This procedure applies to the following model-

P46770

1. Open glass doors and remove two (2) screws and screen holding brackets.
2. Pull screen out at bottom and let it slide down gently until there is enough space at the top to get a hold of it.
3. Grasp screen securly with both hands and remove.
4. To install, make sure that the long side with slots is at the bottom . Reverse removal instructions.

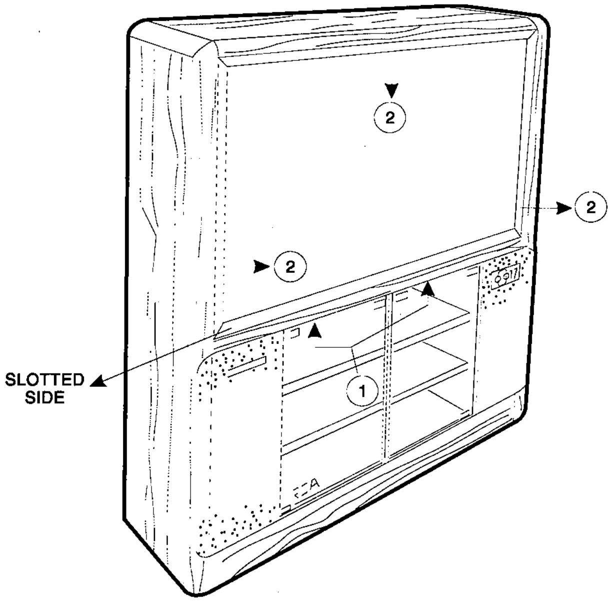

Fig. 7- Screen removal Model P46770

Screen Removal

Note: This procedure applies to the following model-
P52756

1. Remove grille cloth from each side by pulling away from instrument to release from velcro.
2. Remove four (4) screws from each side of the plastic front bottom half (Do Not remove speaker mounting screws).
3. Remove plastic front bottom half.

   Caution: FPA is attached to plastic front, tilt top of plastic front outward to gain access to the FPA. Release the PC Board snaps and remove plasticfront bottom half.
4. Remove three (3) screws securing the lower flange of the screen.
5. Remove the back cover (15 screws).
6. Remove three (3) screws at the topand two (2) screws from each side.
7. Grasp screenframe with both hands and pull straight away from instrument.
8. To install, reverse removal instructions.

Note: For access to convergence adjustments follow Steps 1, 2 and 3.

INSTRUMENT DISASSEMBLY (Continued)

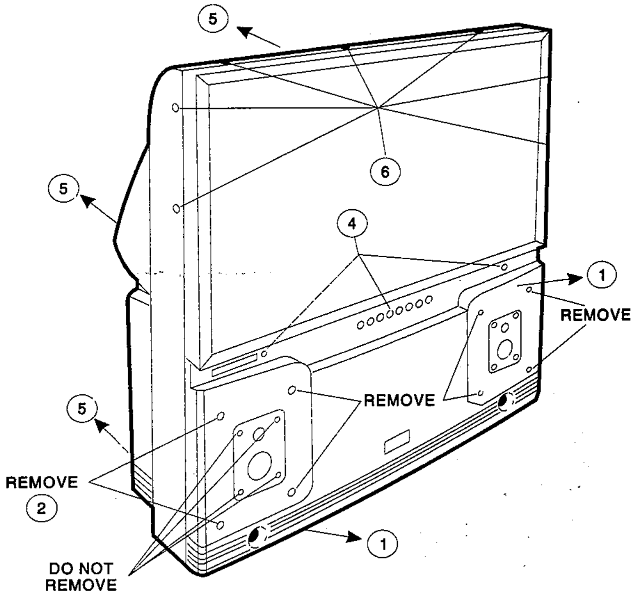

Fig. 8- Screen Removal Model P52756

Screen Removal

Note: This procedure applies to the following model-
P52770

1. Remove speaker grille(s) and front plastic panel(s). Pull them out and away from instrument to release from velcro.
2. Remove screws and holding brackets, three (3) along bottom of screen and one (1) on each side of screen.
3. Pull screen out at bottom and let it slide down gently until there is enough space at the top to grasp the screen firmly for removal.

Note: This model does not have a screen frame.

4. To install, reverse removal instructions.

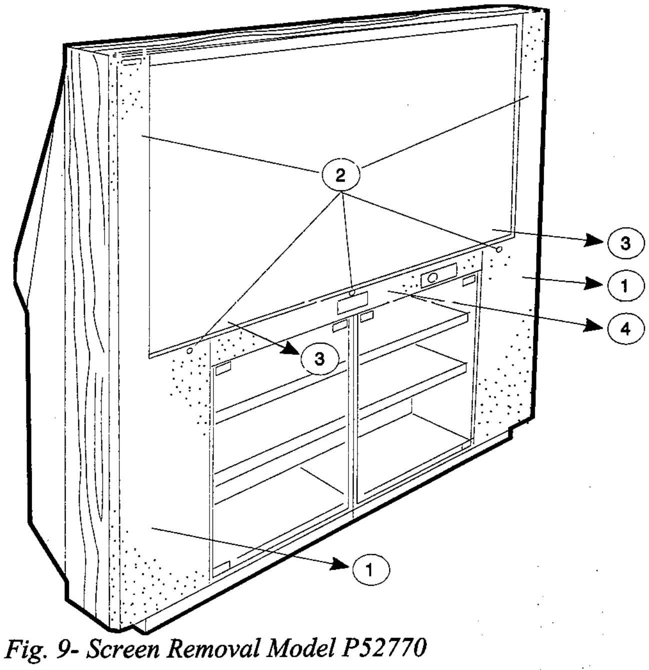

Fig. 9- Screen Removal Model P52770

Screen Removal

Note: This procedure applies to the following model-
P60752

1. Remove cloth grille from both side, pull away from instrument to release from velcro.
2. Remove four (4) screws from each side of plastic front bottom half (DO NOT remove screws from speaker mounting).
3. Remove plastic front bottom half.

CAUTION: FPA is attached to plastic front, tilt top of plastic front outward to gain access to the FPA. Release the PC Board snaps and remove the plastic front bottom half.

4. Remove three (3) screws that secure the lower screen flange.
5. Pull the screen out at the bottom and push it up approximately 1 inch to release it from the top holding bracket.
6. Grasp screen with both hands and remove.
7. To install, reverse removal procedure.

CAUTION: Be careful not to scratch the screen on the top holding bracket.

Note: For access to the convergence adjustments follow Steps 1, 2 and 3.

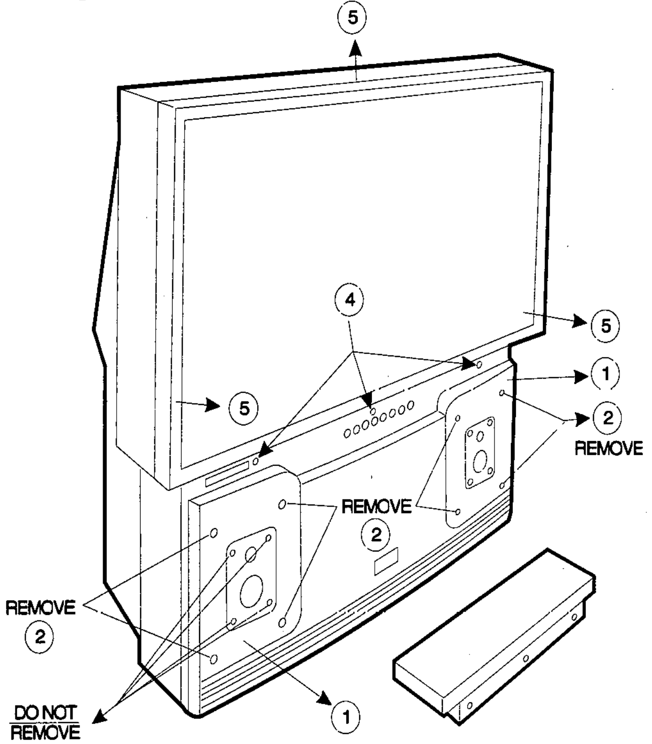

Fig. 10- Screen Removal Model P60752

NOTES

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SERVICE ADJUSTMENTS

Note: Service adjustment procedures must be performed in the following sequence, unless specified otherwise. AC line voltage should be approximately 120VAC. Customer controls should be set to nominal (PICTURE RESET in the *Video* menu) unless specified otherwise.

HV Regulator Adjustment

Test Point:	Q4752-D (HV Boost)	HV REG PCB
Adjust:	R4766 (HV Reg Adj)	HV REG PCB

1. Preset the *Red*, *Green* and *Blue Screen* controls fully counterclockwise.
2. Preset the *HV Regulator Adjust* (R4766) fully counterclockwise.
3. Select channel 92 (blank screen for minimum beam current).
4. Connect a scope probe (20V/20μsec/div, AC coupled) to the drain tab of Q4752; use stake E12 as ground reference.
5. Adjust R4766 clockwise until the peak-to-peak amplitude of the pulse at Q4752-D increases by 20 volts (±10 volts).

Screen Adjustment

Test Point:	Observe Display	
Adjust:	Red Screen control	Focus/Screen
	Green Screen control	Focus/Screen
	Blue Screen control	Focus/Screen

1. Preset the *Red*, *Green* and *Blue Screen* controls fully counterclockwise.
2. Preset the *Bias* and *Drive* controls to midrange.
3. Select channel 92 (no signal - blank screen).
4. Looking directly at the red lens, turn the *Red Screen* control clockwise until a dim raster appears. Then adjust the control counterclockwise until the raster just disappears.
5. Looking directly at the green lens, turn the *Green Screen* control clockwise until a dim raster appears. Then adjust the control counterclockwise until the raster just disappears.
6. Looking directly at the blue lens, turn the *Blue Screen* control clockwise until a dim raster appears. Then adjust the control counterclockwise until the raster just disappears.

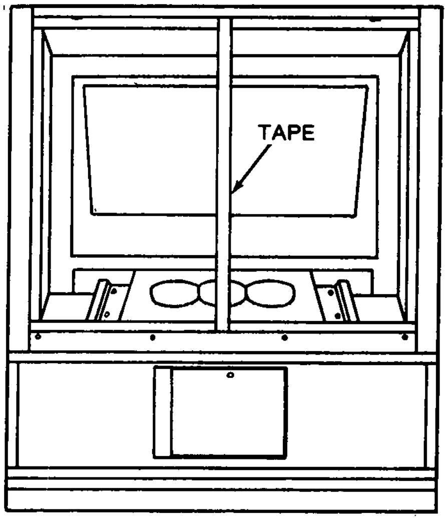


Fig. 1 - Focus Adjustment

Focus Adjustment

Test Point:	Observe Display	
Adjust:	Red Focus control	Focus/Screen
	Green Focus control	Focus/Screen
	Blue Focus control	Focus Screen
	Red Lens	Red CRT
	Green Lens	Green CRT
	Blue Lens	Blue CRT

1. Tune the instrument to display a crosshatch signal.
2. Remove the screen assembly to gain access to the picture tube lenses.

Electrical Focus Coarse Adjustment

3. Look directly into the red lens and adjust the *Red Focus* control for best focus.
4. Look directly into the green lens and adjust the *Green Focus* control for best focus.
5. Look directly into the blue lens and adjust the *Blue Focus* control for best focus.

Optical Focus Adjustment

6. Extend a length of masking tape (1/2" wide) vertically from the cabinet top rail to the cabinet FPA rail (see Fig. 1) to simulate the screen assembly. Align the tape with the vertical crosshatch line at the center of the display.
7. Cover the green and blue lenses. Loosen the red lens wing nut and adjust (rotate) the red lens for best focus.
8. Cover the red and blue lenses. Loosen the green lens wing nut and adjust (rotate) the green lens for best focus.
9. Cover the red and green lenses. Loosen the blue lens wing nut and adjust (rotate) the blue lens for best focus.

Electrical Focus Fine Adjust

10. Cover the green and blue lenses. Adjust the *Red Focus* control for best focus.
11. Cover the red and blue lenses. Adjust the *Green Focus* control for best focus.
12. Cover the red and green lenses. Adjust the *Blue Focus* control for best focus.

SERVICE ADJUSTMENTS (Continued)

Green Raster Adjustment

Test Point:	Observe Display	
Adjust:	Centering Rings	Yoke Assembly
	Yoke Tilt	Yoke Assembly
	R4306 (H Phase)	Main PCB
	R4522 (V Height)	Main PCB
	R4802 (H Width)	Main PCB
	R4805 (Pin Amp)	Main PCB
	R8210 (GV Pin)	Conv Gen PCB
	R8212 (GH Pin)	Conv Gen PCB
	R8399 (GV Ctr)	Conv Gen PCB
	R8423 (GV Lin)	Conv Gen PCB

1. Cover the red and blue lenses.
2. Tune the instrument to receive a crosshatch signal.

Yoke Tilt Adjustment

3. Slightly loosen the yoke clamp screw. While viewing the center horizontal crosshatch line, rotate the yoke assembly to eliminate any tilt in the display. Check to make sure that the yoke assembly has not moved away from the bell of the picture tube and tighten the yoke clamp screw.

Centering Adjustment

4. Adjust the *Vertical Linearity* control (R8423) so that the crosshatch blocks near the top of the display are the same height as the blocks near the bottom of the display (coarse adjustment).
5. Adjust the *Vertical Height* control (R4522) and the *Horizontal Width* control (R4802) so that the edges of the raster are visible.
6. Adjust the *Green Centering* rings for minimum correction (see Fig. 2).

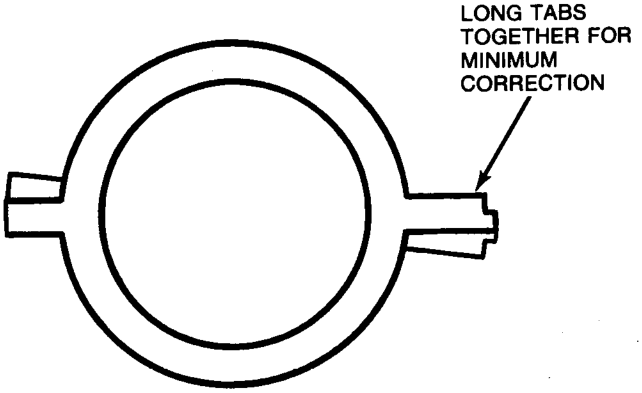


Fig. 2 - Centering Rings

7. Viewing the top and bottom edges of the display, adjust the *Green Vertical Centering* control (R8399) to center the raster vertically.
8. Viewing the left and right edges of the display, adjust the *Green Centering* rings to center the raster horizontally. Spreading the tabs increases the amount of correction and rotating both tabs together changes the direction of the correction.

Pincushion Adjustment

9. Preset the *Green Horiz Pin* control (R8212) to midrange.
10. Adjust the *Pincushion Amp* control (R4803) for straight vertical lines at the left and right edges of the display (coarse adjustment).
11. Adjust the *Green Horiz Pin* control (R8212) for straight vertical lines at the left and right edges of the display (fine adjustment).
12. Adjust the *Green Vert Pin* control (R8210) for straight horizontal lines at the top and bottom edges of the display.

Vertical Linearity Adjustment

13. Adjust the *Horizontal Width* control (R4802) so that the raster just fills the screen.
14. Adjust the *Vertical Height* control (R4522) so that the raster just fills the screen.
15. Adjust the *Green Vert Linearity* control (R8423) so that the crosshatch blocks near the top of the display are the same height as the blocks near the bottom of the display (final adjustment). If necessary, readjust the *Green Vertical Centering* control (R8399) to center the raster vertically.

Video Centering Adjustment

16. Using the *Setup* menu, set the time display for 1 o'clock.
17. Select channel 90 (S-Video Input) for a blank raster.
18. Adjust the *Horizontal Phase* control (R4306) to center the Time/Channel display as shown in Figure 3.

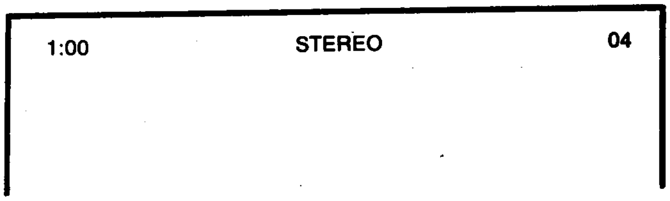


Fig. 3 - Time/Channel Display

Size Adjustment

19. Tune the instrument to receive a crosshatch signal.
20. Adjust the *Horizontal Width* control (R4802) for approximately 1" overscan at the left and right edges of the display.
21. Adjust the *Vertical Height* control (R4522) for approximately 1 1/2" overscan at the top and bottom edges of the display.

Red Raster (Convergence) Adjustment

Test Point:	Observe Display	
Adjust:	Centering Rings	Yoke Assembly
	Yoke Tilt	Yoke Assembly
	R8206 (RV Pin)	Conv Gen PCB
	R8208 (RH Pin)	Conv Gen PCB
	R8220 (RV Key)	Conv Gen PCB
	R8222 (RH Key)	Conv Gen PCB
	R8230 (RV Bow)	Conv Gen PCB
	R8232 (RH Lin)	Conv Gen PCB
	R8238 (RV Skew)	Conv Gen PCB
	R8240 (RH Size)	Conv Gen PCB
	R8246 (RV Sub Key)	Conv Gen PCB
	R8248 (RH Sub Pin)	Conv Gen PCB
	R8254 (RV Size)	Conv Gen PCB
	R8256 (RH Skew)	Conv Gen PCB
	R8262 (RV Lin)	Conv Gen PCB
	R8264 (RH Bow)	Conv Gen PCB
	R8272 (RH Sub Lin)	Conv Gen PCB
	R8276 (RV Sub Pin)	Conv Gen PCB

1. Select channel 90 (S-Video Input) for a blank raster.
2. Using the VIDEO menu, display the customer static convergence pattern.
3. Set the red centering adjustments to midrange. This can be accomplished by marking the range of the horizontal and vertical adjustments, then setting each to midrange.
4. Tune the instrument to receive a crosshatch signal and cover the blue lens.
5. Preset the *Red Convergence Controls* to midrange.

Raster Tilt

6. Adjust the *Red Horiz Bow* control (R8264) for a straight vertical centerline (coarse adjust).
7. Adjust the *Red Vert Bow* control (R8230) for a straight horizontal centerline (coarse adjust).
8. Slightly loosen the yoke clamp screw and rotate the yoke assembly to balance any vertical and horizontal skew error, leaving the vertical centerline and the horizontal centerline tilted in opposite directions.

Centering Adjustment

9. Adjust the red centering rings to align the red crosshatch display with the green crosshatch display. Adjust for best convergence at the *center* of the display only.

Skew/Bow Adjustment

10. While viewing the top and bottom edges of the display, adjust the *Red Horiz Skew* control (R8256) and the *Red Horiz Bow* control (R8264) to converge the vertical centerline.
11. While viewing the left and right edges of the display, adjust the *Red Vert Skew* control (R8238) and the *Red Vert Bow* control (R8230) to converge the horizontal centerline.
12. Recheck *Centering Adjustment* and readjust if necessary.

Keystone Adjustment

13. While viewing the top left and right corners of the display, adjust the *Red Vert Key* control (R8220) so that red misconvergence is the same in both corners (either above green in both corners or below green in both corners).
14. While viewing the bottom left and right corners of the display, adjust the *Red Vert Sub Key* control (R8246) so that red misconvergence is the same in both corners (either above green in both corners or below green in both corners).
15. While viewing the top right and bottom right corners of the display, adjust the *Red Horiz Key* control (R8222) so that red misconvergence is the same in both corners (either left of green in both corners or right of green in both corners).
16. Recheck *Centering Adjustment* and *Skew/Bow Adjustment* and readjust if necessary.

Pincushion Adjustment

17. While viewing the top horizontal crosshatch line, adjust the *Red Vert Pin* control (R8206) for a straight red line.
18. While viewing the bottom horizontal crosshatch line, adjust the *Red Vert Sub Pin* control (R8276) for a straight red line.
19. While viewing the far right vertical crosshatch line, adjust the *Red Horiz Pin* control (R8208) for a straight red line.
20. While viewing the far left vertical crosshatch line, adjust the *Red Horiz Sub Pin* control (R8248) for a straight red line.
21. Recheck *Centering Adjustment*, *Skew/Bow Adjustment* and *Keystone Adjustment* and readjust if necessary.

Size/Linearity Adjustment

22. While viewing the top and bottom of the display, adjust the *Red Vert Linearity* control (R8262) to balance the misconvergence between the top and bottom crosshatch lines.
23. Adjust the *Red Vert Size* control (R8254) to converge the top and bottom horizontal crosshatch lines.
24. Repeat steps 22 and 23 and readjust the *Red Centering Rings* as necessary to converge the horizontal crosshatch lines.
25. While viewing the vertical crosshatch lines located halfway between center and the sides of the display, adjust the *Red Horiz Sub Linearity* control (R8272) so that the misconvergence on the left is the same magnitude (but opposite direction) as the right side.
26. While viewing the left and right sides of the display, adjust the *Red Horiz Linearity* control (R8232) to balance the misconvergence between the far left and right vertical crosshatch lines.

SERVICE ADJUSTMENTS (Continued)

27. Adjust the *Red Horiz Size* control (R8240) to converge the far left and right vertical crosshatch lines.
28. Repeat steps 25, 26 and 27 and readjust the *Red Centering Rings* as necessary to converge the vertical crosshatch lines.
29. Recheck *Centering Adjustment, Skew/Bow Adjustment, Keystone Adjustment* and *Pincushion Adjustment* and readjust if necessary.

Blue Raster (Convergence) Adjustment

Test Point:	Observe Display	
Adjust:	Centering Rings	Yoke Assembly
	Yoke Tilt	Yoke Assembly
	R8202 (BV Pin)	Conv Gen PCB
	R8204 (BH Pin)	Conv Gen PCB
	R8215 (BV Key)	Conv Gen PCB
	R8217 (BH Key)	Conv Gen PCB
	R8226 (BV Bow)	Conv Gen PCB
	R8228 (BH Lin)	Conv Gen PCB
	R8234 (BV Skew)	Conv Gen PCB
	R8236 (BH Size)	Conv Gen PCB
	R8242 (BV Sub Key)	Conv Gen PCB
	R8244 (BH Sub Pin)	Conv Gen PCB
	R8250 (BV Size)	Conv Gen PCB
	R8252 (BH Skew)	Conv Gen PCB
	R8258 (BV Lin)	Conv Gen PCB
	R8260 (BH Bow)	Conv Gen PCB
	R8270 (BH Sub Lin)	Conv Gen PCB
	R8274 (BV Sub Pin)	Conv Gen PCB

1. Select channel 90 (S-Video Input) for a blank raster.
2. Using the VIDEO menu, display the customer static convergence pattern.
3. Set the blue centering adjustments to midrange. This can be accomplished by marking the range of the horizontal and vertical adjustments, then setting each to midrange.
4. Tune the instrument to receive a crosshatch signal and cover the red lens.
5. Preset the *Blue Convergence Controls* to midrange.

Raster Tilt

6. Adjust the *Blue Horiz Bow* control (R8260) for a straight vertical centerline (coarse adjust).
7. Adjust the *Blue Vert Bow* control (R8226) for a straight horizontal centerline (coarse adjust).
8. Slightly loosen the yoke clamp screw and rotate the yoke assembly to balance any vertical and horizontal skew error, leaving the vertical centerline and the horizontal centerline tilted in opposite directions.

Centering Adjustment

9. Adjust the *Blue Centering Rings* to align the blue crosshatch display with the green crosshatch display. Adjust for best convergence at the *center* of the display only.

Skew/Bow Adjustment

10. While viewing the top and bottom edges of the display, adjust the *Blue Horiz Skew* control (R8252) and the *Blue Horiz Bow* control (R8260) to converge the vertical centerline.
11. While viewing the left and right edges of the display, adjust the *Blue Vert Skew* control (R8234) and the *Blue Vert Bow* control (R8226) to converge the horizontal centerline.
12. Recheck *Centering Adjustment* and readjust if necessary.

Keystone Adjustment

13. While viewing the top left and right corners of the display, adjust the *Blue Vert Key* control (R8215) so that blue misconvergence is the same in both corners (either above green in both corners or below green in both corners).
14. While viewing the bottom left and right corners of the display, adjust the *Blue Vert Sub Key* control (R8242) so that blue misconvergence is the same in both corners (either above green in both corners or below green in both corners).
15. While viewing the top right and bottom right corners of the display, adjust the *Blue Horiz Key* control (R8217) so that blue misconvergence is the same in both corners (either left of green in both corners or right of green in both corners).
16. Recheck *Centering Adjustment* and *Skew/Bow Adjustment* and readjust if necessary.

Pincushion Adjustment

17. While viewing the top horizontal crosshatch line, adjust the *Blue Vert Pin* control (R8202) for a straight blue line.
18. While viewing the bottom horizontal crosshatch line, adjust the *Blue Vert Sub Pin* control (R8274) for a straight blue line.
19. While viewing the far right vertical crosshatch line, adjust the *Blue Horiz Pin* control (R8204) for a straight blue line.
20. While viewing the far left vertical crosshatch line, adjust the *Blue Horiz Sub Pin* control (R8244) for a straight blue line.
21. Recheck *Centering Adjustment, Skew/Bow Adjustment* and *Keystone Adjustment* and readjust if necessary.

Size/Linearity Adjustment

22. While viewing the top and bottom of the display, adjust the *Blue Vert Linearity* control (R8258) to balance the misconvergence between the top and bottom crosshatch lines.
23. Adjust the *Blue Vert Size* control (R8250) to converge the top and bottom horizontal crosshatch lines.

SERVICE ADJUSTMENTS (Continued)

24. Repeat steps 22 and 23 and readjust the *Blue Centering Rings* as necessary to converge the horizontal crosshatch lines.
25. While viewing the vertical crosshatch lines located halfway between center and the sides of the display, adjust the *Blue Horiz Sub Linearity* control (R8270) so that the misconvergence on the left is the same magnitude (but opposite direction) as the right side.
26. While viewing the left and right sides of the display, adjust the *Blue Horiz Linearity* control (R8228) to balance the misconvergence between the far left and right vertical crosshatch lines.
27. Adjust the *Blue Horiz Size* control (R8236) to converge the far left and right vertical crosshatch lines.
28. Repeat steps 25, 26 and 27 and readjust the *Blue Centering Rings* as necessary to converge the vertical crosshatch lines.
29. Recheck *Centering Adjustment*, *Skew/Bow Adjustment*, *Keystone Adjustment* and *Pincushion Adjustment* and readjust if necessary.

Note: Refer to the CONVERGENCE SCHEMATIC (2 OF 2) for the location and function of the convergence controls. This information is also shown on the label attached to the front of the convergence panel.

Color Temperature

Test Point:	Observe Display	
Adjust:	R2913 (Red Bias)	Main PCB
	R2921 (Green Bias)	Main PCB
	R2917 (Blue Bias)	Main PCB
	R2926 (R/B Drive)	Main PCB
	R2928 (G Drive)	Main PCB

1. Tune the instrument to receive a color bar signal.
2. Preset the *Drive* controls to midrange and the *Bias* controls to minimum.
3. Defeat the chroma portion of the signal by either A) turning off the chroma at the signsl generator, or B) shorting pin 42 of U1001 (located on the Main PCB) to ground.
4. Observe the darkest bar and note which color (red, green or blue) is predominate. Adjust the *Bias* controls (R2913, R2921 and R2917) to obtain a gray bar.
5. Observe the brightest bar and adjust the *Red/Blue Drive* control (R2926) and the *Green Drive* control (R2928) to obtain a white bar.
6. Repeat steps 3 and 4 as necessary to obtain good white tracking.

SERVICE ADJUSTMENTS (Continued)

Convergence Adjustments (Chassis Family 4)

Test Point:	Observe Display	
Adjust:	Conv Controls	Conv Gen PCB
	Pin Controls	Main PCB

1. Hold menu button and push + button momentarily to turn on the service pattern., or tune the receiver to receive a crosshatch pattern.

NOTE: For best results the convergence adjustments should be adjusted in the order indicated. Other adjustments may be required.

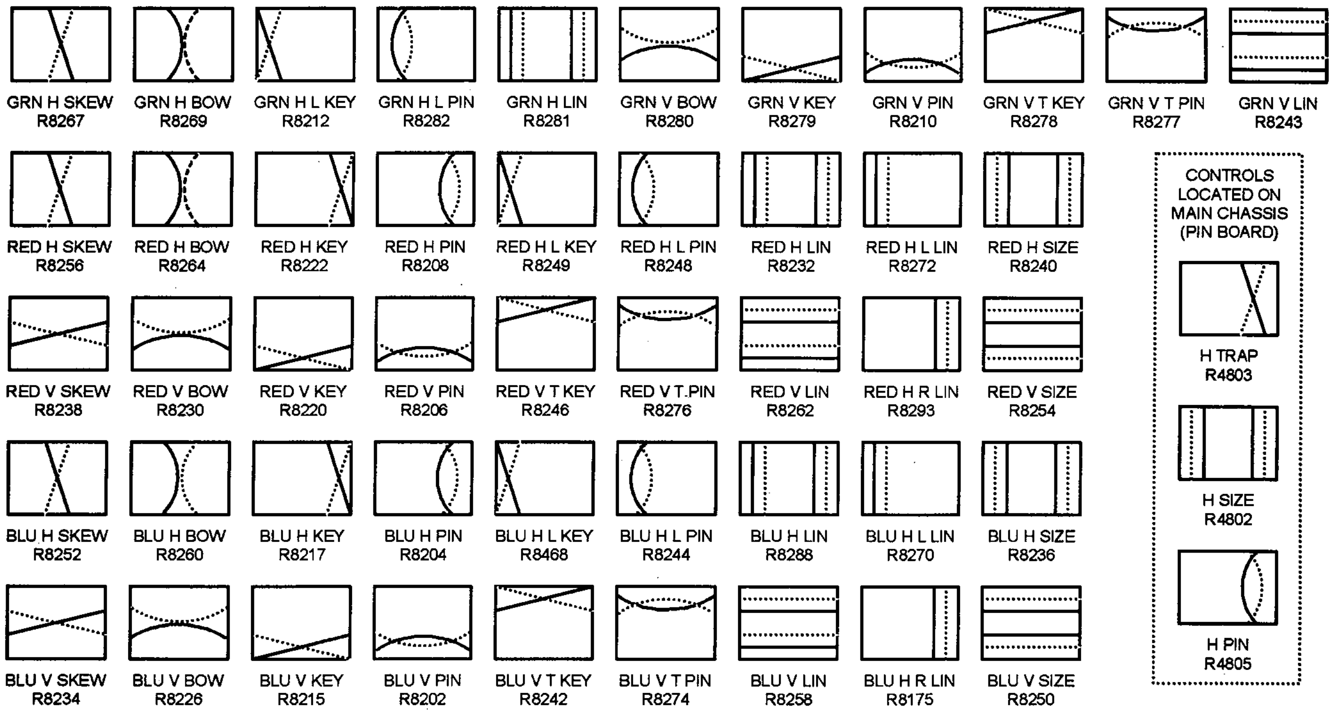
2. Cover the red and blue lenses.
3. Adjust the *Green Vertical Bow* control, R8280, for a straight horizontal centerline.
4. While viewing the center vertical line, alternately adjust *Green Horiz Skew* and *Green Horiz Bow* controls, R8267 and R8269, for a straight vertical centerline.
5. While viewing right and left sides adjust *Horiz Size* control R4802 for 1\2 inch over scan both sides.
6. While viewing right side of display alternately adjust the *Horiz Trap and Horiz Pin* controls, R4802 and R4805, for straight vertical line.
7. While viewing left side of display alternately adjust the *Green Horiz Left Key and Green Horiz Left Pin* controls, R8212 and R8282, for straight vertical line.
8. While viewing right and left sides of the display adjust the *Green Horiz Linearity* control, R8281, so that the crosshatch blocks on the left side of the display and the right side of the display are the same size.
9. While viewing bottom of display, alternately adjust the *Green Vert Key and Green Vert Pin* controls, R8279 and R8210, for straight horizontal line.
10. While viewing Top of display, alternately adjust the *Green Vert Top Key and Green Vert Top Pin* controls, R8278 and R8277, for straight horizontal line. Repeat Steps 9 and 10 as necessary.
11. While viewing the top and bottom of the display adjust the *Green Vert Lin* control, R8413, so that the crosshatch blocks at the top of the display are the same size as the crosshatch blocks at the bottom of the display.
12. Remove cover from the Red Lens. Using the VIDEO menu, display the customer static convergence pattern. Superimpose the red convergence lines on the green convergence lines at the center of the display.
13. Revert to crosshatch pattern and adjust the *Red Horiz Skew and Red Horiz Bow* controls, R8256 and R8264, for straight red vertical center line superimposed on the green vertical center line.
14. While viewing the right side of the display adjust the *Red Horiz Key and Red Horiz Pin* controls, R8222 and R8208, for straight red vertical line superimposed on the vertical green line.
15. While viewing the left side of the display adjust the *Red Horiz Left Key and Red Horiz Left Pin* controls, R8469 and R8248, for straight red vertical line superimposed on the green vertical line.
16. While viewing the right and left sides of the display alternately adjust the *Red Horiz Lin and RedHoriz Size* controls, R8232 and R8240, so that the crosshatch blocks on the left side of the display are the same size as the crosshatch blocks on the right side of the display and are superimposed on the green crosshatch blocks.
17. While viewing the right and left sides of the display alternately adjust the *Red Horiz Left Lin and Red Horiz Right Lin* controls, R8272 and R8293, so that the crosshatch blocks on the left side of the display are the same size as the crosshatch blocks on the right side of the display.
18. Repeat Steps 14, 15, 16, and 17 as required.
19. While viewing the middle of the display alternately adjust the *Red Vert Skew and Red Vert Bow* controls for straight red horizontal centerline superimposed on green horizontal centerline.
20. While viewing the bottom of the display alternately adjust the *Red Vert Key and Red Vert Pin* controls, R8220 and R8206, for straight red horizontal line superimposed on green horizontal line.
21. While viewing the top of the display alternately adjust the *Red Vert Top Key and Red Vert Top Lin* controls for straight red horizontal line superimposed on green horizontal line.
22. While viewing the top and bottom of the display alternately adjust the *Red Vert Lin and RedVert Size* controls so that the top crosshatch blocks are the same size as the bottom crosshatch blocks and are superimposed on the green crosshatch blocks.
23. Remove cover from the Blue Lens. Using the VIDEO menu, display the customer static convergence pattern. Superimpose the blue convergence lines on the red / green convergence lines at the center of the display.
24. Revert to the crosshatch pattern and adjust the *Blue Horiz Skew and Blue Horiz Bow* controls, R8252 and R8260, for straight blue vertical center line superimposed on the red/green vertical centerline.
25. While viewing the right side of the display alternately adjust the *Blue Horiz Key and Blue Horiz Pin* controls, R8217 and R8204, for straight blue vertical line superimposed on red/green vertical line.
26. While viewing the left side of the display alternately adjust the *Blue Horiz Left Key and Blue Horiz Left Pin* controls for straight blue vertical line superimposed on red/green vertical line.
27. While viewing the right and left sides of the display alternately adjust the *Blue Horiz Lin and Blue Horiz Size* controls, R8228 and R8236, so that the crosshatch blocks on the left side of the display are the same size as the crosshatch blocks on the right side of the display and are superimposed on the red/green crosshatch blocks.
28. While viewing the right and left sides of the display alternately adjust the *Blue Horiz Left Lin and Blue Horiz Right Lin* controls, R8270 and R8175, so that the crosshatch blocks on the left side of the display are the same size as the crosshatch blocks on the right side of the display and are superimposed on the red/green crosshatch blocks.

SERVICE ADJUSTMENTS (Continued)

29. Repeat Steps 25, 26, 27, and 28 as required for best results.
30. While viewing the horizontal centerline of the display alternately adjust the *Blue Vert Skew and Blue Vert Bow* controls, R8234 and R8226, for straight blue horizontal centerline superimposed on the red/green horizontal centerline.
31. While viewing the bottom of the display alternately adjust the *Blue Vert Key and Blue Vert Pin* controls, R8215 and R8202, for staight blue horizontal line superimposed on red/green horizontal line.
32. While viewing the top of the display alternately adjust the *Blue Vert Top Key and Blue Vert Top Pin* controls, R8242 and R8274, for straight horizontal line superimposed on red/green horizontal line.
33. While viewing the top and bottom of the display alternately adjust the *Blue Vert Lin and Blue Vert Size* controls, R8258 and R8250, so that the crosshatch blocks at the top of the display are the same size as the crosshatch blocks at the bottom of the display.
34. Repeat Steps as required to obtain best overall results.

Convergence Control Panel Layout

For best results the convergence adjustments should be adjusted in the order indicated.
The location and the clockwise action (dashed line) of each control is shown.



GRN H SKEW R8267
GRN H BOW R8269
GRN H L KEY R8212
GRN H L PIN R8282
GRN H LIN R8281
GRN V BOW R8280
GRN V KEY R8279
GRN V PIN R8210
GRN V T KEY R8278
GRN V T PIN R8277
GRN V LIN R8243
RED H SKEW R8256
RED H BOW R8264
RED H KEY R8222
RED H PIN R8208
RED H L KEY R8249
RED H L PIN R8248
RED H LIN R8232
RED H L LIN R8272
RED H SIZE R8240
CONTROLS LOCATED ON MAIN CHASSIS (PIN BOARD)
RED V SKEW R8238
RED V BOW R8230
RED V KEY R8220
RED V PIN R8206
RED V T KEY R8246
RED V T.PIN R8276
RED V LIN R8262
RED H R LIN R8293
RED V SIZE R8254
H TRAP R4803
BLU H SKEW R8252
BLU H BOW R8260
BLU H KEY R8217
BLU H PIN R8204
BLU H L KEY R8468
BLU H L PIN R8244
BLU H LIN R8288
BLU H L LIN R8270
BLU H SIZE R8236
H SIZE R4802
BLU V SKEW R8234
BLU V BOW R8226
BLU V KEY R8215
BLU V PIN R8202
BLU V T KEY R8242
BLU V T PIN R8274
BLU V LIN R8258
BLU H R LIN R8175
BLU V SIZE R8250
H PIN R4805

CHASSIS ALIGNMENT

Note: Chassis alignment procedures must be performed in the following sequence, unless specified otherwise. AC line voltage should be approximately 120VAC. Customer controls should be set to nominal (PICTURE RESET in the *Video* menu) unless specified otherwise.

Regulated B+ Standby Adjustment

Test Point:	TP4101 (Reg B+)	Main PCB
Adjust:	R4113 (Standby Adj)	Main PCB

1. Place the instrument in the standby mode (AC power applied, instrument OFF).
2. Connect a DC voltmeter to TP4101 (pin 9 of T4102); use pin 5 of T4102 as ground reference.
3. Adjust the *Regulated B+ Standby* control (R4113) for 140.0 ± 0.5 VDC.

Video Detector Alignment

Test Point:	TP2305 (IF AGC)	Main PCB
Adjust:	L2304 (Video Detector)	Main PCB

1. Connect an external marker generator to the chassis IF input (Tuner pin 3) through a 1000pF capacitor; use the tuner shield as ground reference. Set the marker generator for a 45.75 MHz (CW) marker.
2. Short TP2310 (+ lead of C2307) to ground (− lead of C2307).
3. Connect a DC voltmeter to TP2305 (+ lead of C2304); use the tuner shield as ground reference.
4. Adjust the *Video Detector* coil (L2304) for minimum voltage at TP2305.

4.5 MHz Detector Alignment

Test Point:	U1001-52 (Audio Out)	Main PCB
Adjust:	L1202 (4.5 MHz Det)	Main PCB

1. Tune the instrument to receive a signal with audio modulation.
2. Connect a scope probe (0.1V/0.5msec/div.) to U1001 pin 52; use the tuner shield as ground reference.
3. Adjust the *4.5 MHz Detector* coil (L1201) for maximum signal at U1001-52.

NOTE: L1201 tuning is very broad. For proper alignment, identify the range of the control in which the signal is maximum, then center the control within that range.

AFT Alignment

Test Point:	TP2309 (AFT)	Main PCB
Adjust:	L2303 (AFT)	Main PCB

1. Connect an external marker generator to the chassis IF input (Tuner pin 3) through a 1000pF capacitor; use the tuner shield as ground reference. Set the marker generator for a 45.75 MHz (CW) marker.
2. Connect a DC voltmeter to TP2309 (U1001 pin 50); use the tuner shield as ground reference.
3. Preset the *AFT* coil (L2303) fully clockwise; the DC voltmeter should read approximately 2.5 VDC.
4. Adjust L2303 counterclockwise until the voltage at TP2309 reaches a maximum, then decreases to 2.5 ± 0.1 VDC.

RF AGC Alignment

Test Point:	Observe Display	
Adjust:	R2311 (RF AGC)	Main PCB

The *RF AGC* control (R2311) has been aligned for optimum performance over a wide range of RF signal conditions. Readjustment of R2311 should not be necessary unless:

a. the tuner has been replaced,
b. the CTV IC (U1001) has been replaced,
c. R2311 has been replaced or misadjusted, or
d. unusual signal conditions exist, such as cable TV adjacent channel interference, picture bending, channel 6 color beats, broadcast noise or weak signal conditions.

Cable TV ajacent channel interference, picture bending and channel 6 color beats are usually a result of excessive signal level, and may be improved by adjusting R2311 to lower the gain of the tuner; however, this may result in a reduction in S/N ratio (noise due to weak signal).

Broadcast noise and weak signal may be improved adjusting R2311 to increase the gain of the tuner; however, this may result in a degradation of overload capabilities (interference or distortion due to excessive signal).

If the *RF AGC* control must be adjusted, use the weakest local broadcast channel as a signal source. After adjusting the control, check performance on all available channels.

Wide Band Audio Level Adjustment

Test Point:	TP1205 (WB Audio)	Main PCB
Adjust:	R1204 (WBA Level)	Main PCB

1. Tune the instrument to receive the signal from a MTS generator (B&K model 2009, or equivalent). Set the generator to provide an L+R modulating signal with 300 Hz audio.
2. Connect a scope probe (0.1V/5msec/div.) to TP1205 (JS1907 of the Digital Audio sip); use pin JS1906 as ground reference.
3. Adjust the *Wide Band Audio Level* control (R1204) for 75 ± 5 mVRMS at TP1205.

CHASSIS ALIGNMENT (Continued)

Sub Brightness Adjustment

Test Point:	KS5001R-8 (Red Cathode)	Kine Drive PCB
Adjust:	R3346 (Sub Bright)	Main PCB

1. Tune the instrument to receive a super pulse signal (RCA model WR-515A, or equivalent).
2. Connect a scope probe (20V/20μsec/div.) to pin 8 of the kine socket on the Red Kine Driver board; use J5002 as ground reference.
3. Adjust the *Sub Brightness* control (R3346) for 50.0 ± 1.0 Vp-p, with 0 IRE black level (refer to Figure 4).

Contrast Preset Adjustment

Test Point:	Q2906-E (Luma Out)	Main PCB
Adjust:	R2730 (Contrast Preset)	Main PCB

1. Tune the instrument to receive a super pulse signal (RCA model WR-515A, or equivalent).
2. Connect a scope probe (0.5V/20μsec/div.) to the emitter of Q2906 (or JW454); use the tuner shield as ground reference.
3. Adjust the *Contrast Preset* control (R2730) for 2.0 ± 0.1 Vp-p at the emitter of Q2906.

Analog Comb Filter Adjustment (CTC169M,N only)

Test Point:	U2601-7 (Luma Out)	Main PCB
Adjust:	L2601 (Notch Freq)	Main PCB
	R2603 (Notch Depth)	Main PCB

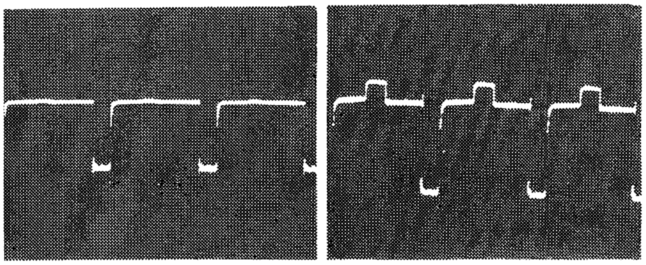
1. Tune the instrument to receive a color bar signal.
2. Connect a scope probe (500mV/20μsec/div.) to pin 7 of U2601; use the tuner shield as ground reference.
3. Alternately adjust the *Notch Frequency* control (L2601) and the *Notch Depth* control (R2603) to minimize the level of the chroma burst portion of the signal.

Chroma Filter Alignment

Test Point:	Observe Display	
Adjust:	R2802 (Filter Adj)	Main PCB

1. Tune the instrument to receive a color bar signal.
2. Adjust the *Chroma Filter* control (R2802) for proper color display with clean transitions between bars.

NOTE: With R2802 set fully clockwise, colors in the display will be faded. With R2802 set fully counterclockwise, the display will be monochrome (no color). The correct setting should be near midrange. After completing the adjustment, check various broadcast channels to insure that there is no delay in color reproduction when a channel is tuned.



Properly adjusted Misadjusted

Fig. 4 - Sub Brightness Adjustment

Tint Preset Adjustment

Test Point:	Observe Display	
Adjust:	R2816 (Tint Preset)	Main PCB

1. Tune the instrument to receive a strong local broadcast.
2. Using the *Video* menu, set *Tint* to center.
3. Adjust the *Tint Preset* control (R2816) for proper flesh tone reproduction.

High Voltage Check

High voltage is NOT adjustable. High voltage at maximum beam current (bright picture) is 30.0 kV ± 0.6 kV. High voltage must not exceed 32.0 kV under any conditions.

High Voltage Measurement

1. Tune the instrument to receive a strong signal with bright picture content.
2. Using the *Video* menu, set *Brightness* and *Contrast* to maximum.
3. Connect a high impedance (> 20Megohm) DC voltmeter between the emitter of Q4701 (+ lead) and ground (− lead); both test points are located on the HV Splitter circuit board.

   HV = (meter reading + 0.6V) x 487

Shutdown Check

The following procedure must be performed prior to servicing, and after servicing deflection, high voltage or regulated B+ circuits, to assure proper operation of the shutdown circuit.

1. Using the VIDEO menu, set *brightness* and *contrast* to maximum.
2. Short stakes TP4902 (XRPI) and TP4901 (XRP2) together. The instrument must shut down, cycle on and off three times and then shut down and remain off, even if the short is removed. Once the short is removed, the instrument should not return to normal operation until the power button is pressed.

PIX-IN-PIX (S-PIP) ALIGNMENT

Note: S-PIP alignment procedures must be performed in the following sequence, unless specified otherwise. AC line voltage should be approximately 120VAC. Customer controls should be set to nominal (PICTURE RESET in the *Video* menu) unless specified otherwise.

3.58 MHz Oscillator Alignment

Test Point:	Q8410-E (Osc Out)	S-PIP PCB
Adjust:	C8403 (3.58MHz Osc)	S-PIP PCB

1. Connect test equipment as shown in Figure 5.
2. Tune the instrument to receive a color bar signal. Select PIP mode to display the color bar signal in both the main pix and insert pix.
3. Short U8401 pin 1 to ground; this allows the 3.58 MHz oscillator to free-run.
4. Connect a frequency counter (use a 100X probe) to the emitter of Q8410; use the PIP shield as ground reference.
5. Adjust the *3.58 MHz Oscillator* control (C8403) for 3.579545 kHz ± 15 Hz at Q8410-E.
6. Remove the short added in step 3.

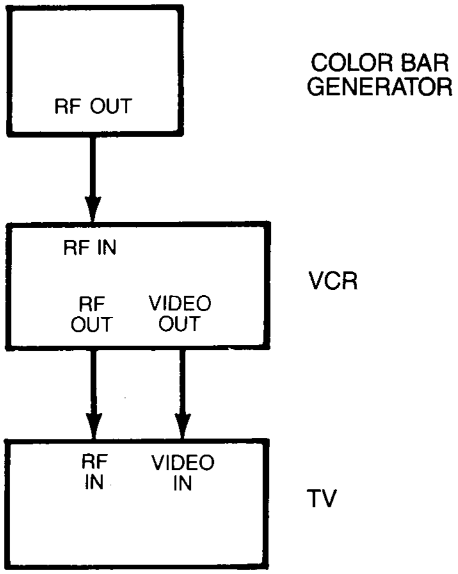


Fig. 5 - S-PIP Alignment Set-Up

14.318 MHz Oscillator Alignment

Test Point:	U8301-19 (3.58MHz)	S-PIP PCB
Adjust:	C8329 (14.318MHz Osc)	S-PIP PCB

1. Connect test equipment as shown in Figure 5.
2. Tune the instrument to receive a color bar signal. Select PIP mode to display the color bar signal in both the main pix and insert pix.
3. Short U8301 pin 6 to ground to allow the 14.318 MHz oscillator to free-run; the insert pix should lose color.
4. Connect a frequency counter (use a 100X probe) to U8301 pin 19; use the PIP shield as ground reference.
5. Adjust the *14.318 MHz Oscillator* control (C8329) for 3.579795 kHz ± 5 Hz at U8301-19.
6. Remove the short added in step 3.

125 kHz Oscillator Alignment

Test Point:	Observe Display	
Adjust:	L8501 (125kHz Osc)	S-PIP PCB

1. Connect test equipment as shown in Figure 5.
2. Tune the instrument to receive a color bar signal. Select PIP mode to display the color bar signal in both the main pix and insert pix.
3. Short U8503 pin 3 to ground; the insert picture should lose horizontal sync.
4. Adjust the *125 kHz Oscillator* control (L8501) to minimize the movement of the insert pix.
5. Remove the short added in step 3; the insert pix should be stable.

Burst Blanking Adjustment

Test Point:	U8301-3 (PIP Chroma)	S-PIP PCB
Adjust:	R8326 (Burst Blanking)	S-PIP PCB

1. Connect test equipment as shown in Figure 5.
2. Tune the instrument to receive a color bar signal. Select PIP mode to display the color bar signal in both the main pix and insert pix.
3. Connect a scope probe (50mV/10μsec/div.) to U8301 pin 3 (JW301); use the PIP shield as ground reference.
4. Adjust the *Burst Blanking* control (R8326) to eliminate burst from the chroma signal.

NOTE: As the control is adjusted through its range, the level of burst *and* chroma signal will vary. Start with the control preset fully counterclockwise. As the control is adjusted clockwise, the signal should reach a peak, then a null, then a second peak. The correct setting for the control is at the null between the two peaks.

Luma Gain (Insert Pix) Adjustment

Test Point:	Q8306-C (Insert Luma)	S-PIP PCB
Adjust:	R8336 (Luma Gain)	S-PIP PCB

1. Connect test equipment as shown in Figure 5.
2. Tune the instrument to receive a color bar signal. Select PIP mode to display the color bar signal in both the main pix and insert pix.
3. Connect a scope probe (0.5V/20μsec/div.) to the collector of Q8306; use the PIP shield as ground reference.
4. Adjust the *Luma Gain* control (R8336) for 1.30 ± 0.10 Vp-p (black-to-white) at Q8306-C.

PIX-IN-PIX (S-PIP) ALIGNMENT (Continued)

Color Saturation Adjustment

Test Point:	Q8302-C (V IN)	S-PIP PCB
Adjust:	R8324 (Saturation)	S-PIP PCB

1. Connect test equipment as shown in Figure 5.
2. Tune the instrument to receive a color bar signal. Select PIP mode to display the color bar signal in both the main pix and insert pix.
3. Connect a scope probe (0.2V/20μsec/div.) to the collector of Q8302; use the PIP shield as ground reference.
4. Adjust the *Saturation* control (R8324) for 1.3V ± 0.1 Vp-p at Q8203-C.

Luma Reference Level Adjustment

Test Point:	Observe Display	
Adjust:	R8517 (Y Ref)	S-PIP PCB

1. Connect test equipment as shown in Figure 5.
2. Tune the instrument to receive a color bar signal. Select PIP mode to display the color bar signal in both the main pix and insert pix.

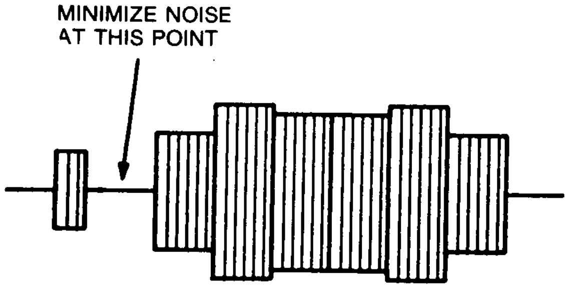


Fig. 6 - R − Y/B − Y Null Adjustment

3. Using the VIDEO menu, set the customer color control to minimum.
4. Adjust the *Y Reference* control (R8517) to match the luminance levels of the main pix and the insert pix.

Chroma Reference Level Adjustments

Test Point:	Q8210-E (PIP Chroma)	S-PIP PCB
Adjust:	R8422 (R−Y Null)	S-PIP PCB
	R8424 (B−Y Null)	S-PIP PCB
	R8307 (Tint)	S-PIP PCB
	R8518 (U/V Ref)	S-PIP PCB

1. Connect test equipment as shown in Figure 5.

R − Y/B − Y Null Adjustments

2. Tune the instrument to receive a color bar signal. Select PIP mode to display the color bar signal in both the main pix and insert pix.
3. Connect a scope probe (0.1V/20μsec/div.) to the emitter of Q8210; use the PIP shield as ground reference.
4. Alternately adjust the *R − Y Null* control (R8422) and the *B − Y Null* control (R8424) to minimize the non-chroma portion of the signal at Q8210-E (see Fig. 6).

Tint and U/V Reference Adjustments

5. Tune the instrument to receive a local broadcast color signal. Select PIP mode to display the signal in both the main pix and insert pix.
6. Adjust the *Tint* control (R8307) and the *U/V Reference* control (R8518) to match the flesh tones and chroma saturation of the insert pix to the flesh tones and chroma saturation of the big pix.
7. Repeat steps 2 through 6.

DIGITAL COMB FILTER

Sync Level Adjust

This adjustment is sealed at time of manufacture and should require no further adjustment. If control (R6488) is replaced or adjustment is deemed necessary the following procedure is recommended.

Test Point:	JS6407	Comb SIP
Adjust:	R6488	Comb SIP

1. Apply 75% split field NTSC color bar signal to instrument.
2. Connect oscilloscope probe (2.0V/20μS per Div.) to JS6407.
3. Adjust R6488 to produce 2.0V p-p response.

Reference Voltage Adjust (White Stretch)

Test Point:	CR6401	Comb SIP
Adjust:	R6421	Comb SIP

1. Apply 75% split field NTSC color bar signal to instrument.
2. Adjust: *Color control* to mid-range,
   Contrast control to 3/4 range,
   Brightness control to mid-range.
3. Allow OSD menu to time out (disappear).
4. Connect DVM across zener diode CR6401.
5. Adjust R6421 for 0 ± .005VDC.
6. Remove test equipment.

MPX (STEREO) ALIGNMENT

Test Equipment Required:

Audio Generator-Capable of generating 99404 Hz and 15734 Hz.
Frequency Counter-20 Mhz.
Oscilloscope-Wideband
Digital Volt Meter-Triplett 3550 or equivalent.
Stereo Generator-B & K 2009 or equivalent.

Preparation:

Remove AC power from instrument. Clip jumper wire JW377.

Procedure:

Stereo LPF/SAP BPF Alignment

1. Apply 99404 Hz signal from Audio Generator to JW377 (sound input to pin 2 of U1600).
2. Connect oscilloscope or DVM to negative leg of C1602 (pin 3 of U1600).
3. Apply AC power to instrument and adjust R1604 for minimum indication.
4. Remove test equipment.

Stereo VCO Adjust

1. Connect 10 uFD capacitor from pin 2 of U1600 to ground.
2. Short pins 38 & 45 to pin 47 (U1600).
3. Connect frequency counter to pin 41 of U1600.
4. Adjust R1616 for 15734 Hz +/- 20 Hz.
5. Remove capacitor from pin 2 of U1600 and short from pins 38 & 45 to pin 47.

Baseband LPF Responses

1. Apply 15734 Hz signal from Audio Generator to JW377.
2. Short pin 39 to pin 40 (U1600) or positive leg to negative leg of C1616.
3. Connect oscilloscope or DVM to negative leg of C1615.
4. Adjust R1606 for minimum response.
5. Remove test equipment.

Remove AC power from instrument and solder JW377 back together (previously clipped).

Low Frequency Separation

1. Apply AC power to instrument and make sure audio is present. Set audio menu for stereo operation with Expanded Stereo (SRS) OFF.
2. Connect MPX (Stereo) Generator to antenna input terminal.
3. Apply L only stereo signal 300 Hz (pilot ON).
4. Connect oscilloscope or DVM to JW207.
5. Adjust R1609 for minimum response.

High Frequency Separation

1. Use same connections as used for Low Frequency Separation except apply L only stereo signal 8 kHZ.
2. Adjust R1611 for minimum response.

Note: If minimum response is obtained only at one end of R1611 rotation, reset R1611 to center of rotation and adjust R1709 for minimum response.

3. Remove all test equipment.

ALIGNMENT–BLACK STRETCH

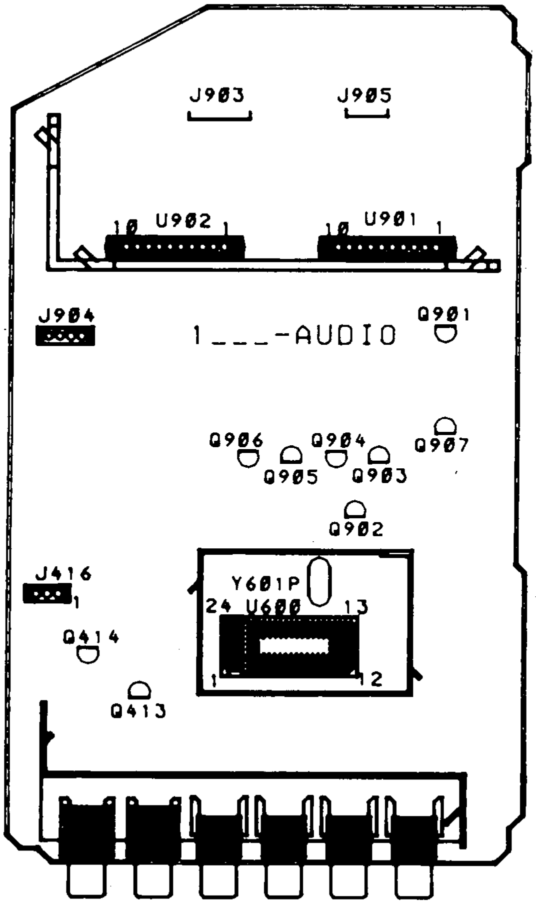
Sync Amplitude Adjust

1. Apply any convenient test signal.
2. Monitor luma output at JS6407.
3. Adjust R6448 to set blanking level (0 IRE) at 2.8 ± 0.1V DC.

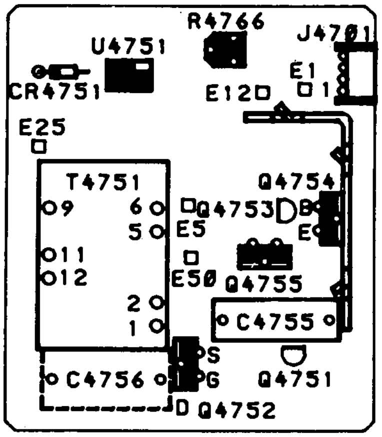
1-D5

TEST POINT LOCATION DIAGRAMS/CHASSIS LAYOUT

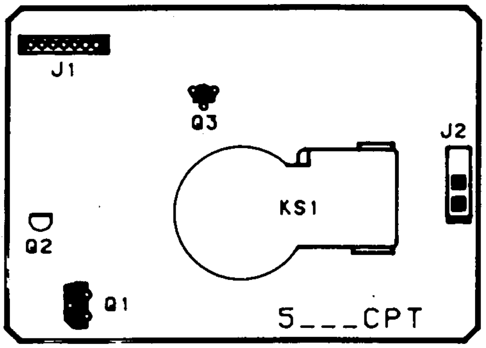
(Chassis Family 1)


J903
J905
U902
U901
10
1
J904
1___-AUDIO
Q901
Q906
Q904
Q907
Q905
Q903
Q902
J416
Y601P
24
U600
13
1
12
Q414
Q413

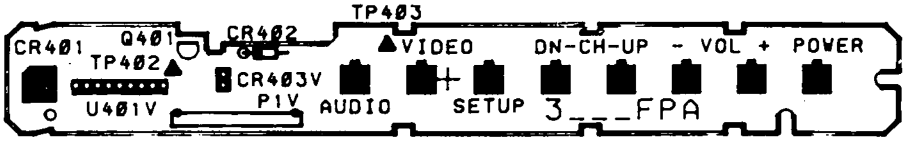
Digital Audio Circuit Board


R4766
U4751
J4701
CR4751
E1
E12
E25
T4751
Q4754
9
6
Q4753
B
5
E5
E
11
12
E50
Q4755
2
1
C4755
S
C4756
G
Q4751
D
Q4752

HV Regulator Circuit Board

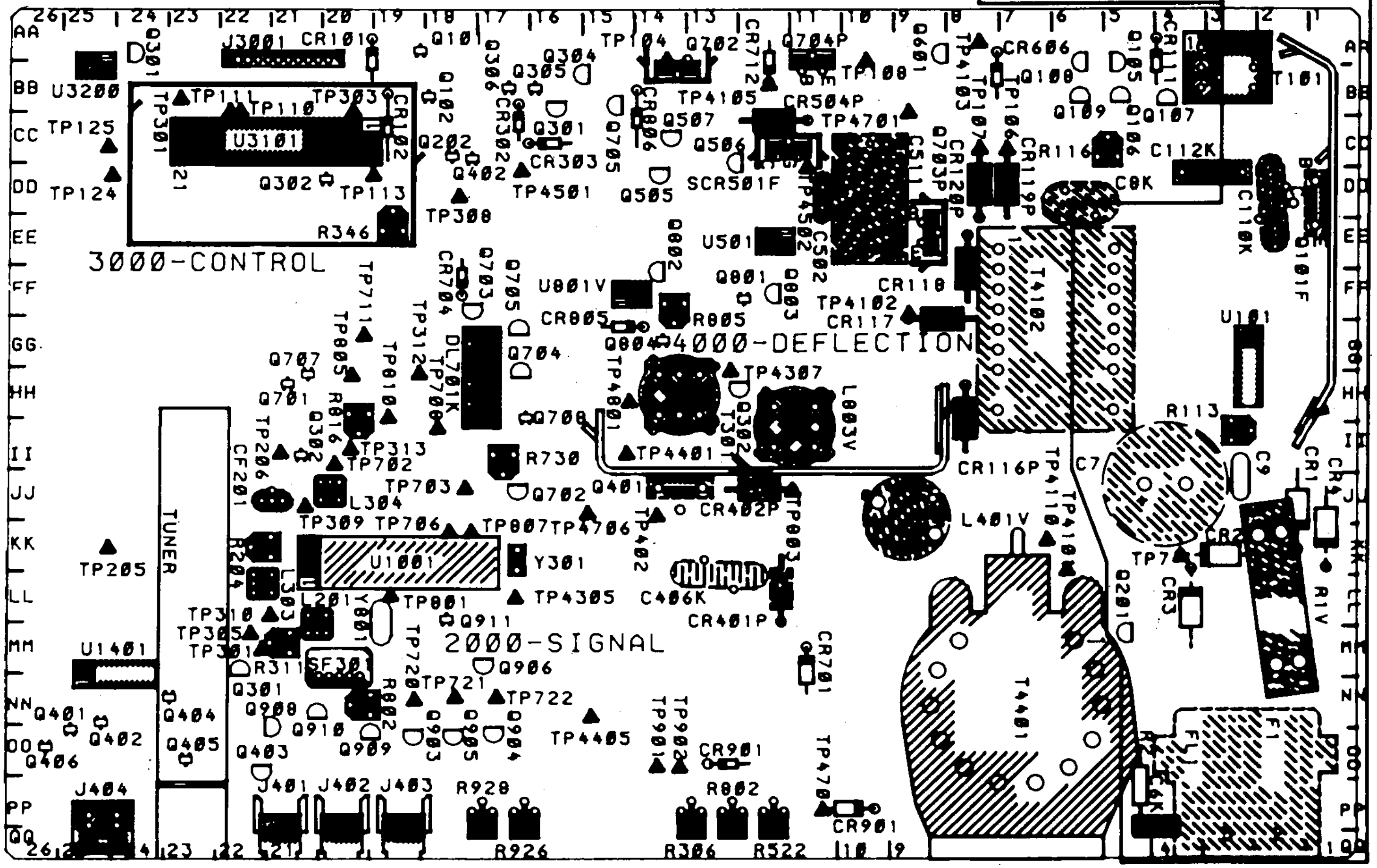

J1
Q3
J2
KS1
Q2
Q1
5___CPT

Kine Driver Circuit Board


TP403
CR401
Q401
CR402
VIDEO
DN-CH-UP
- VOL +
POWER
TP402
CR403V
U401V
P1V
AUDIO
SETUP
3___FPA

Front Panel Circuit Board

CAUTION: THIS SECTION IS 'HOT'. USE ISOLATION XFMR.

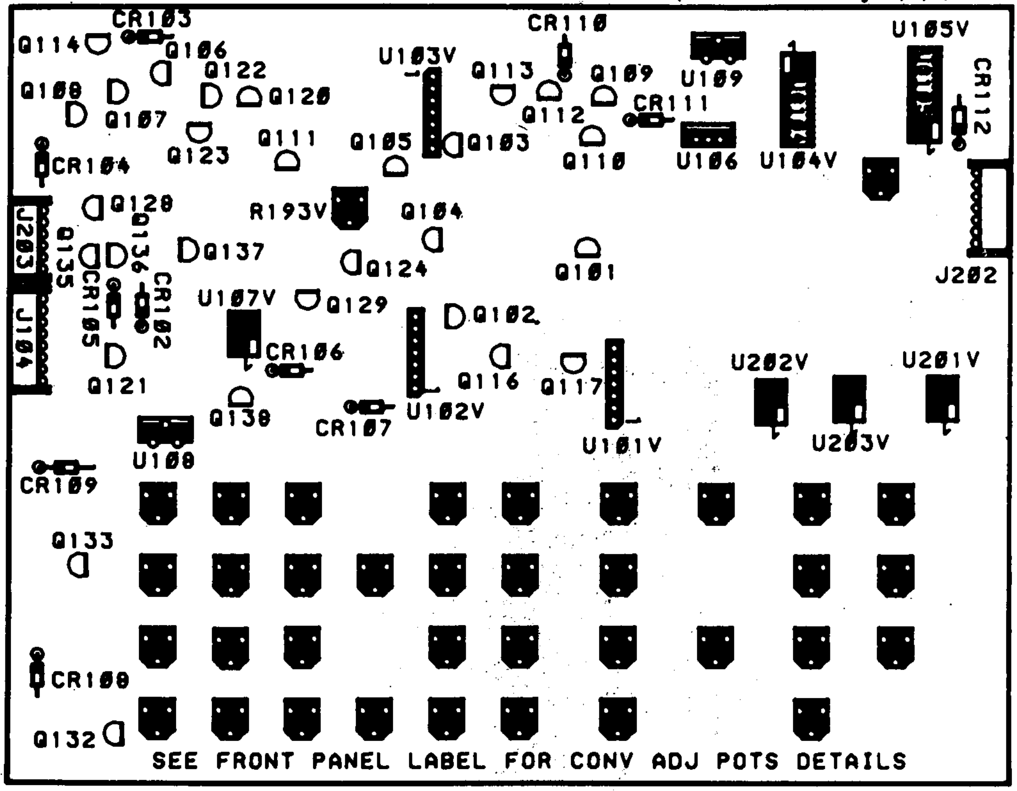

AA
BB
CC
DD
EE
FF
GG
HH
II
JJ
KK
LL
MM
NN
OO
PP
QQ
26
25
24
23
22
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
U3200
Q301
J3001
CR101
Q101
TP104
Q702
CR712
Q704P
Q601
TP4103
CR606
Q105
CR111
T101
TP125
TP301
TP111
TP110
TP303
CR102
U3101
21
Q302
TP113
TP124
R346
3000-CONTROL
Q102
Q306
CR302
Q305
Q304
Q301
CR303
Q202
Q402
TP4501
TP308
Q705
CR806
Q507
Q506
Q505
TP4105
CR504P
TP4701
SCR501F
TP4502
C511
Q703P
CR120P
CR119P
TP107
TP106
CR116
Q100
Q109
Q106
Q107
C112K
C8K
C110K
Q101F
U501
C502
Q802
U801V
CR805
Q801
Q803
R805
Q804
4000-DEFLECTION
TP4102
CR117
CR118
T4102
U101
TP711
CR704
Q703
Q705
TP312
DL701K
TP805
TP810
TP708
Q707
Q701
Q704
Q708
TP4801
TP4307
T301
Q302
L803V
R816
Q302
TP206
CF201
TP313
TP702
TP703
R730
L304
Q702
Q401
TP402
CR402P
TP803
TP4401
CR116P
C7
C9
R113
CR1
TP4110
TP4101
L401V
TP309
TP706
TP807
TP4706
TUNER
TP205
R204
L303
L201
U1001
Y301
TP4305
C406K
TP801
Y801
Q911
CR401P
Q201
TP7
CR2
CR3
R1V
TP310
TP305
TP301
R311
SF301
2000-SIGNAL
TP720
R802
Q906
CR701
U1401
Q301
TP721
TP722
T4401
Q401
Q402
Q406
Q404
Q405
Q900
Q910
Q909
Q403
Q903
Q905
Q904
TP4405
TP901
TP902
CR901
TP470
F1
FL1
J404
J401
J402
J403
R920
R802
R926
R306
R522
CR901

Main Circuit Board

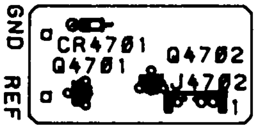
1-D6

TEST POINT LOCATION DIAGRAMS/CHASSIS LAYOUT (Continued)

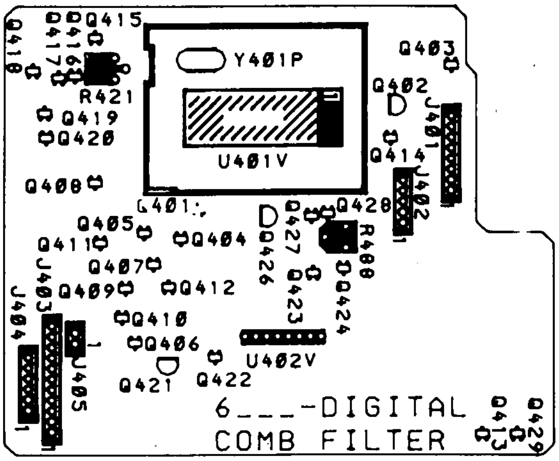
(Chassis Family 1,2,3)


CR103
Q114
Q106
Q122
Q108
Q120
Q107
U103V
Q113
CR110
Q109
U109
U105V
CR112
CR111
Q112
Q123
Q111
Q105
Q103
Q110
U106
U104V
CR104
Q128
R193V
Q104
J203
Q135
Q136
Q137
Q124
Q101
J202
CR105
CR102
U107V
Q129
Q102
J104
Q121
CR106
Q116
Q117
U202V
U201V
Q130
CR107
U102V
U101V
U203V
U108
CR109
Q133
CR108
Q132
SEE FRONT PANEL LABEL FOR CONV ADJ POTS DETAILS

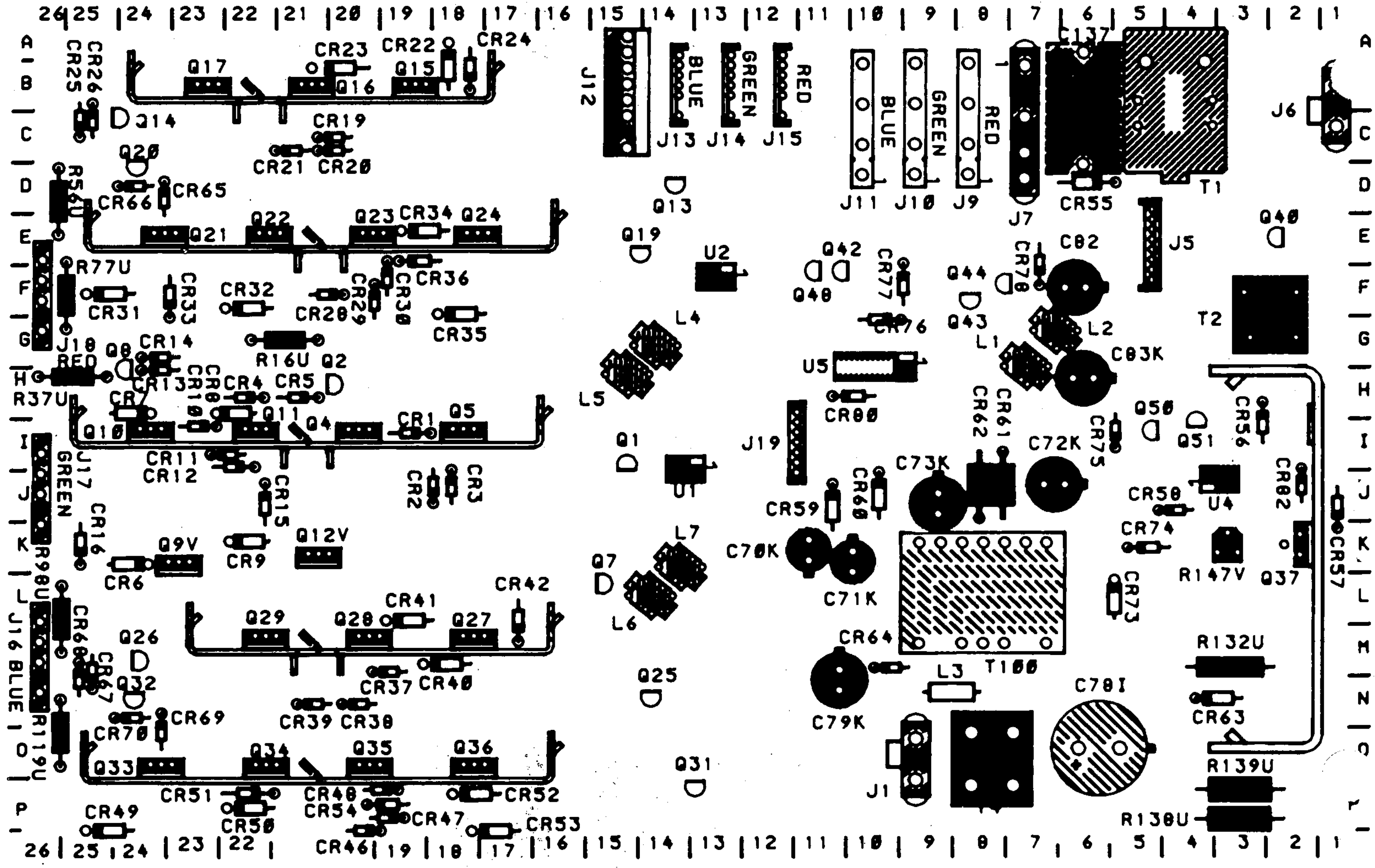
Convergence Circuit Board


GND
REF
CR4701
Q4701
Q4702
J4702
1

HV Splitter Circuit Board


Q415
Q418
Q417
Q416
Y401P
Q403
R421
Q402
Q419
Q420
J401
U401V
Q414
J402
Q408
L401
Q428
Q405
R408
Q411
Q404
Q427
Q407
Q426
J403
Q409
Q412
Q423
Q424
Q410
Q406
U402V
J404
J405
Q421
Q422
6___-DIGITAL
COMB FILTER
Q413
Q429

Digital Comb Circuit Board


26
25
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20
19
18
17
16
15
14
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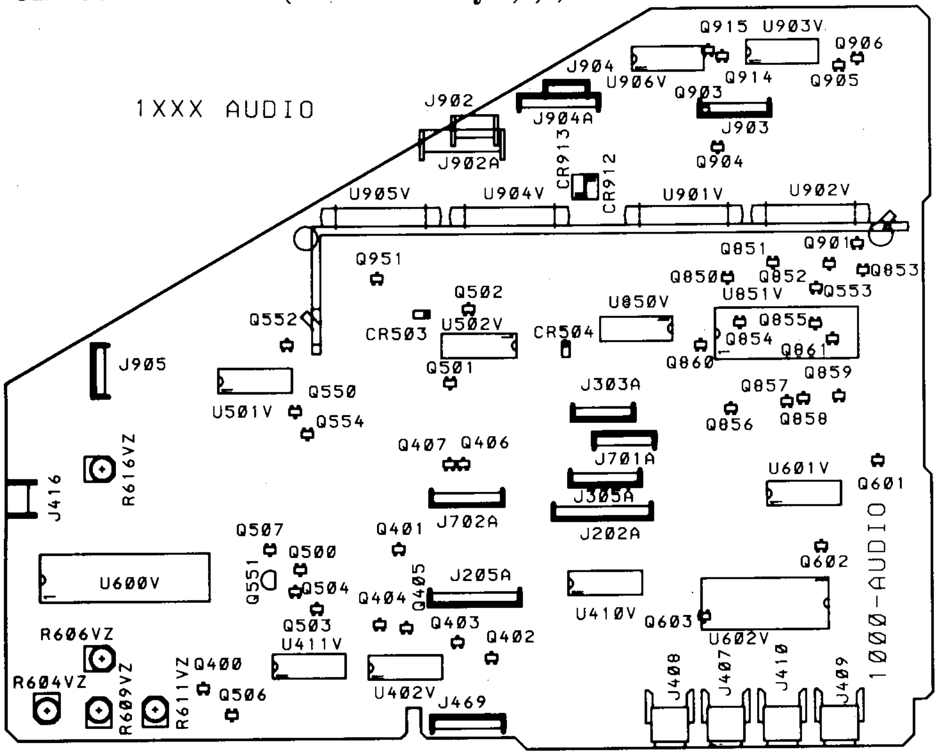
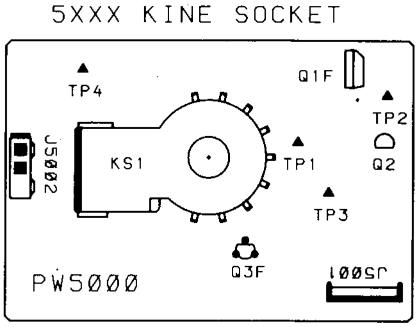
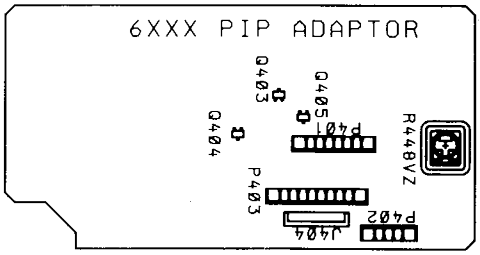
12
11
10
9
8
7
6
5
4
3
2
1
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
CR26
CR25
Q17
CR23
CR22
CR24
Q16
Q15
J12
BLUE
GREEN
RED
C137
J6
Q14
CR19
J13
J14
J15
J11
J10
J9
T1
Q20
CR21
CR20
R5
CR66
CR65
Q13
J7
CR55
Q21
Q22
Q23
CR34
Q24
Q40
Q19
J5
U2
Q42
CR78
C82
R77U
CR36
Q48
CR77
Q44
CR32
CR31
CR33
CR28
CR29
CR30
CR35
L4
Q43
L2
T2
CR76
J18
CR14
R16U
Q2
L1
C83K
RED
Q8
U5
R37U
CR13
CR10
CR4
CR5
CR8
CR7
L5
Q10
Q11
Q4
CR1
Q5
CR80
CR61
CR62
CR75
Q50
CR56
Q51
CR11
Q1
J19
C72K
J17
GREEN
CR12
CR15
CR2
CR3
C73K
U1
CR59
CR60
CR58
U4
CR82
CR16
Q9V
Q12V
L7
C70K
CR74
CR57
R98U
CR9
R147V
Q37
CR6
Q7
C71K
CR73
J16
BLUE
CR68
CR41
CR42
Q29
Q28
Q27
L6
Q26
CR64
R132U
CR67
Q32
CR37
CR40
Q25
L3
T100
C78I
CR69
CR70
CR39
CR38
C79K
CR63
R119U
Q33
Q34
Q35
Q36
R139U
Q31
J1
CR51
CR48
CR52
CR49
CR54
CR47
CR50
R138U
CR46
CR53

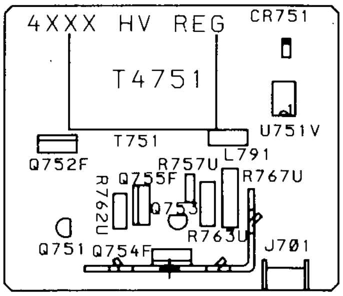
PTV Auxiliary Circuit Board

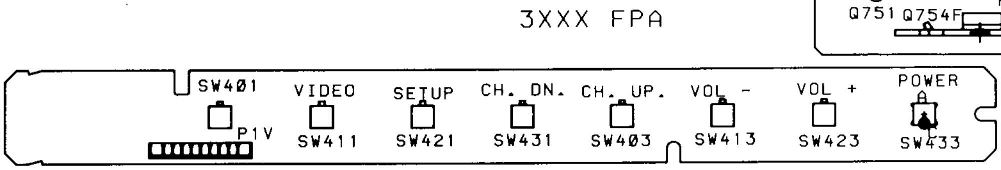
TEST POINT LOCATION DIAGRAMS/ CHASSIS LAYOUT (Chassis Family 2,3,4)

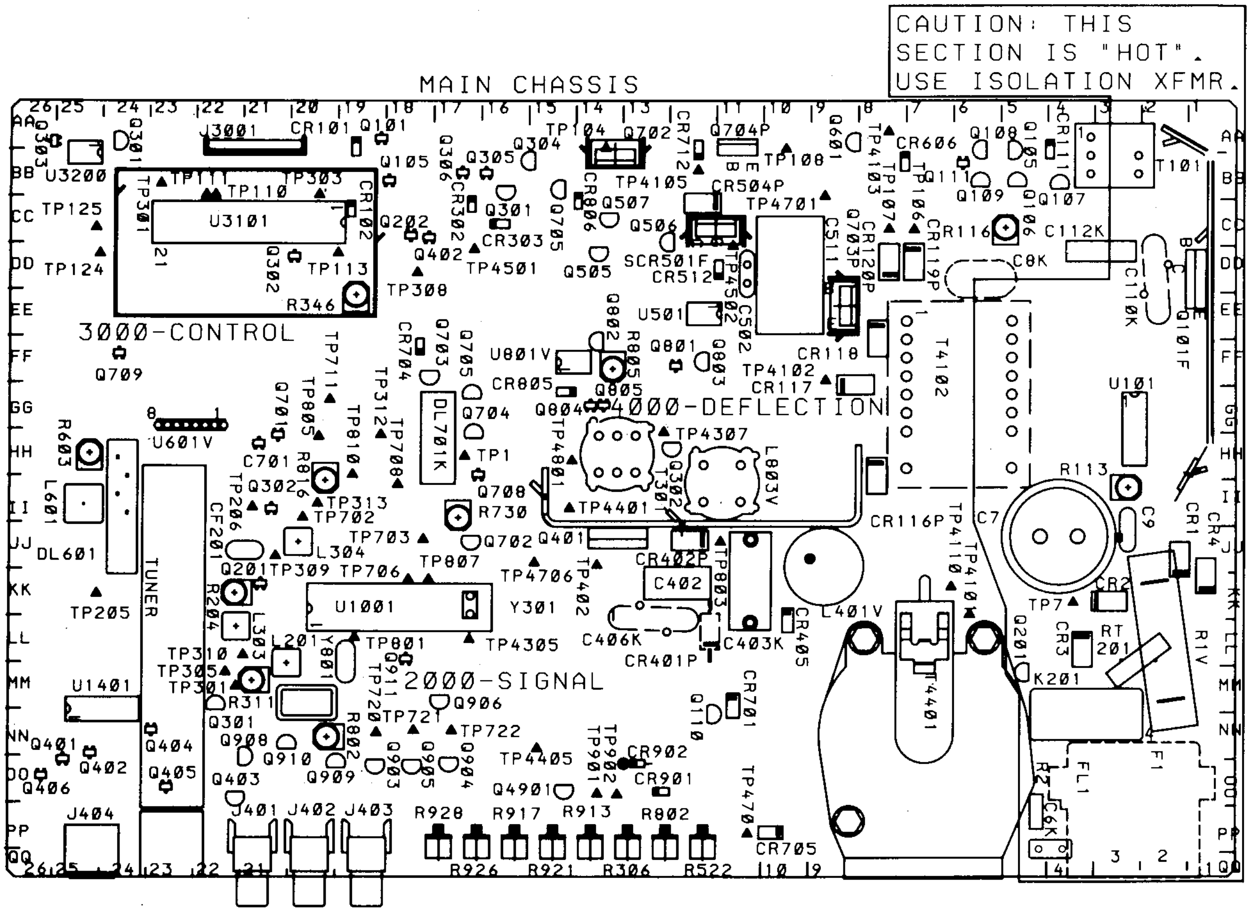

1XXX AUDIO
1000-AUDIO
J902
J902A
J904
J904A
U906V
Q915
U903V
Q906
Q914
Q905
Q903
J903
Q904
CR913
CR912
U905V
U904V
U901V
U902V
Q951
Q851
Q901
Q850
Q852
Q853
U851V
Q553
Q502
U850V
Q552
CR503
U502V
CR504
Q855
Q854
Q861
Q860
Q501
J905
J303A
Q857
Q859
U501V
Q550
Q554
Q856
Q858
Q407
Q406
J701A
R616VZ
J416
U601V
J305A
Q601
J702A
J202A
Q507
Q401
Q500
Q551
Q504
Q405
J205A
Q602
U600V
Q404
Q503
Q403
U410V
Q603
R606VZ
Q402
U411V
U602V
Q400
R611VZ
R609VZ
R604VZ
Q506
U402V
J408
J407
J410
J409
J469


5XXX KINE SOCKET
TP4
Q1F
TP2
J5002
KS1
TP1
Q2
TP3
Q3F
PW5000
J5001


6XXX PIP ADAPTOR
Q403
Q405
Q404
P401
R448VZ
P403
J404
P402


4XXX HV REG
CR751
T4751
U751V
T751
Q752F
L791
R757U
Q755F
R767U
R762U
Q753
R763U
Q751
Q754F
J701


3XXX FPA
SW401
P1V
VIDEO
SW411
SETUP
SW421
CH. DN.
SW431
CH. UP.
SW403
VOL -
SW413
VOL +
SW423
POWER
SW433


CAUTION: THIS SECTION IS "HOT". USE ISOLATION XFMR.
MAIN CHASSIS
3000-CONTROL
4000-DEFLECTION
2000-SIGNAL
TUNER
U3101
U3200
J3001
CR101
Q101
TP111
TP110
TP303
TP301
TP125
TP124
TP113
R346
TP308
T101
T4102
U101
R113
C9
CR1
CR4
CR2
CR3
RT201
R1V
K201
F1
FL1
TP7
U601V
R603
L601
DL601
TP205
U1401
U1001
Y301
TP801
TP4305
TP722
TP4405
CR902
CR901
Q4901
TP4701
CR705
TP4401
TP4307
L803V
T4401
L401V
C402
C406K
C403K
CR401P
CR402P
J404
J401
J402
J403
R928
R917
R913
R802
R926
R921
R306
R522
DL701K
TP4105
TP4501
TP4502
TP4102
TP4103
TP4104
TP4110
TP4801
CR504P
SCR501F
CR512
U501
U801V
Q805
R805
CR805
CR116P
CR117
CR118
C8K
C110K
C112K
R116
CR606
Q108
Q109
Q107
AA
BB
CC
DD
EE
FF
GG
HH
II
JJ
KK
LL
MM
NN
OO
PP
QQ
26
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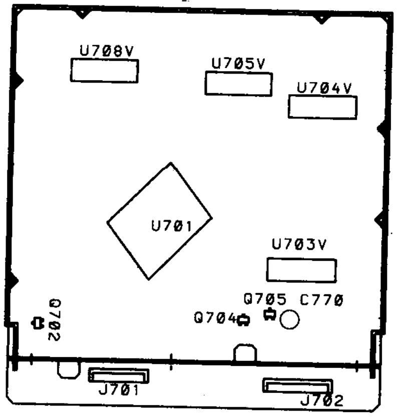
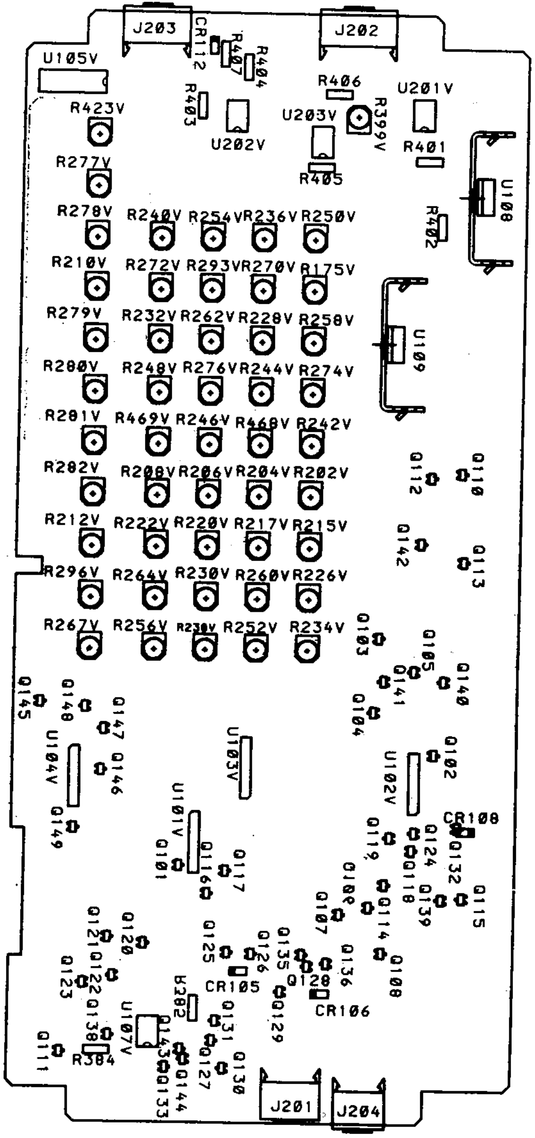
2
1

TEST POINT LOCATION DIAGRAMS/ CHASSIS LAYOUT (Chassis Family 4)

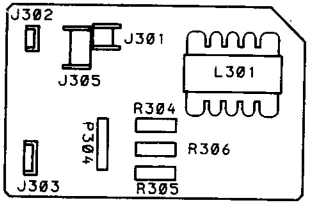
SRS


U708V
U705V
U704V
U701
U703V
Q705
C770
Q704
Q702
J701
J702

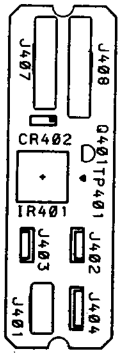
8XXX CONVGEN


J203
CR112
R407
R404
J202
U105V
R406
U201V
R403
U203V
R399V
R423V
U202V
R401
R405
R277V
U108
R278V
R240V
R254V
R236V
R250V
R402
R210V
R272V
R293V
R270V
R175V
R279V
R232V
R262V
R228V
R258V
U109
R280V
R248V
R276V
R244V
R274V
R281V
R469V
R246V
R468V
R242V
R282V
R208V
R206V
R204V
R202V
Q112
Q110
R212V
R222V
R220V
R217V
R215V
Q142
Q113
R296V
R264V
R230V
R260V
R226V
R267V
R256V
R238V
R252V
R234V
Q103
Q105
Q141
Q140
Q145
Q148
Q147
U104V
Q146
U103V
Q104
U102V
Q102
U101V
Q149
Q101
Q116
Q117
Q119
Q124
CR108
Q132
Q118
Q109
Q107
Q139
Q114
Q115
Q121
Q120
Q122
Q123
Q125
Q126
Q135
Q136
Q108
Q128
CR105
R382
CR106
Q131
Q129
U107V
Q138
Q111
R384
Q143
Q127
Q130
Q144
Q133
J201
J204

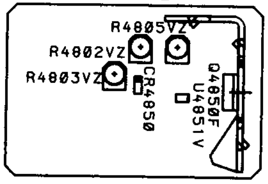
CROSSOVER


J302
J301
L301
J305
R304
P304
R306
J303
R305

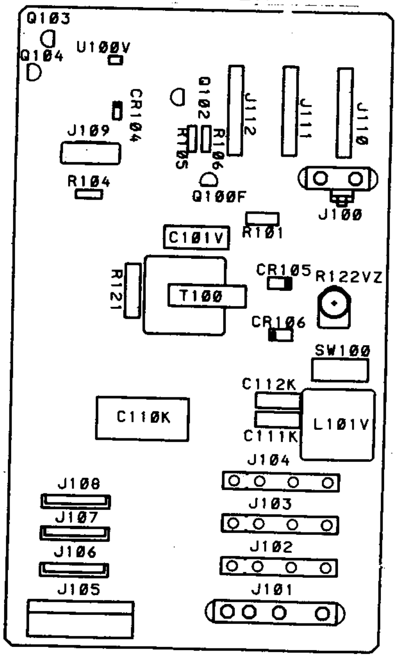
I0 PREAMP


J407
J408
CR402
Q401
TP401
IR401
J403
J402
J401
J404

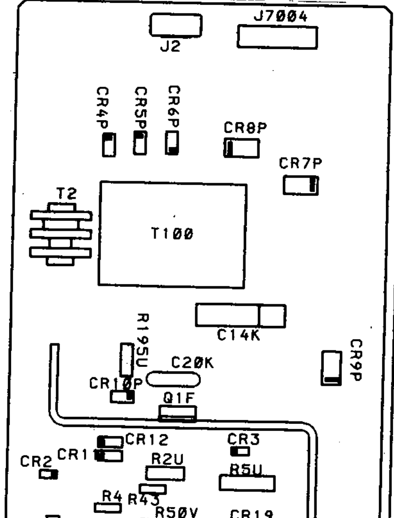
PIN BD


R4805VZ
R4802VZ
R4803VZ
CR4850
Q4050F
U4051V

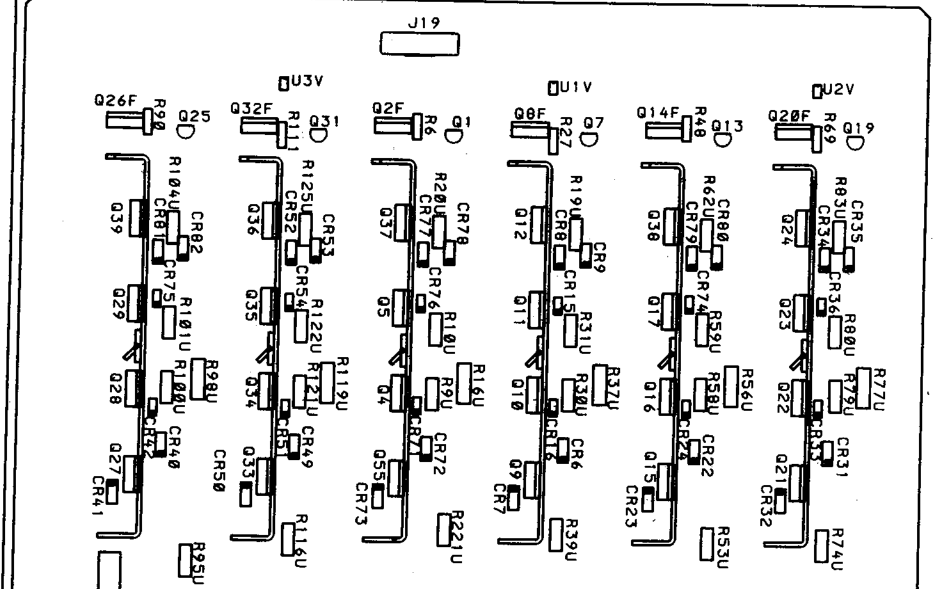
ADAPTER


Q103
Q104
U100V
Q102
J112
J111
J110
CR104
J109
R105
R106
R104
Q100F
J100
R101
C101V
R121
CR105
R122VZ
T100
CR106
SW100
C112K
C110K
C111K
L101V
J104
J108
J107
J103
J106
J102
J105
J101

PWR SUPPLY


J2
J7004
CR4P
CR5P
CR6P
CR8P
CR7P
T2
T100
C14K
R195U
C20K
CR9P
CR10P
Q1F
CR2
CR1
CR12
CR3
R2U
R5U
R4
R43
R50V
R1
U4V
CR19
CR22
CR21
CR20
Q3
Q2
CR15
Q6
Q7
CR14
T4

CONV AMP


J19
U3V
U1V
U2V
Q26F
R90
Q25
Q32F
R111
Q31
Q2F
R6
Q1
Q8F
R27
Q7
Q14F
R48
Q13
Q20F
R69
Q19
R104U
CR81
CR82
Q39
Q36
R125U
CR52
CR53
Q37
R20U
CR77
CR78
Q12
R19U
CR8
CR9
Q38
R62U
CR79
CR80
Q24
R83U
CR34
CR35
CR75
R101U
Q29
Q35
CR54
R122U
Q5
CR76
R10U
Q11
CR15
R31U
Q17
CR74
R59U
Q23
CR36
R80U
Q28
R100U
R98U
Q34
R121U
R119U
Q4
R9U
R16U
Q10
R30U
R37U
Q16
R58U
R56U
Q22
R79U
R77U
CR40
CR42
CR50
CR49
CR72
CR6
CR16
CR22
CR24
CR31
CR33
Q27
CR41
Q33
Q55
CR73
Q9
CR7
Q15
CR23
Q21
CR32
R95U
R116U
R221U
R39U
R53U
R74U
J20
J17

CIRCUIT OVERVIEW

Caution: Hot Chassis Warning

The following circuits are considered HOT (AC line referenced) and must be serviced using an isolation transformer:

- AC Input (Main PCB)
- Horizontal Output (Main PCB)
- B+ Regulator (Main PCB)
- B+ Regulator (PTV Auxiliary PCB)

AC Line Input

The AC line is filtered (FL4001) and rectified (CR4001 - CR4004) to produce the +150V Raw B+. Raw B+ powers both the Main power supply and the PTV Auxiliary power supply.

Main Power Supply

The switch mode power supply on the Main PCB develops Regulated B+ (+143.5V), standby supplies and run supplies. Whenever AC power is supplied to the instrument, the regulator control IC (U4101) operates in the standby mode and the Regulated B+, +15V run, +7V run, +17V run, −17V run and +5V standby supplies are present. When the instrument is turned on, the system control IC (U3101) switches on the remaining run supplies (+12V, +9V, +5V and +9V Horiz. B+) and U4101 operates in the run mode.

Standby Mode

When AC power is supplied to the instrument, Raw B+ is fed to the chopper transistor Q4101 (through T4102) and to the regulator control IC U4101 (through R4003) to start the regulator circuit. U4101 turns on when the voltage at pin 16 reaches 10 volts and remains on until this voltage drops below 7.5 volts. After U4101 begins supplying drive pulses to Q4101, run voltage for U4101 is supplied by a feedback pulse from pins 12 and 13 of T4102 (rectified by CR4101).

This feedback pulse is also rectified by CR4106 and fed to the error amp inside U4101 to regulate the +5V standby supply (during standby mode, the +5V standby supply is the only supply used; the loads on the run supplies are minimal). When AC power is applied, the reference voltage (VREF) at the noninverting input of the error amp is set to 2.5 volts. U4101 sends short duty cycle, 20kHz pulses to the chopper transistor (Q4101) until the feedback voltage reaches 2.5 volts. At this time, VREF is switched to 2.25 volts, and the 20kHz drive pulses are interrupted until the feedback voltage decreases to 2.25 volts. VREF is then switched back to 2.5 volts, and the cycle continues until AC power is removed, or a turn-on command is received. Slow, controlled start-up is provided by the capacitor at U4101 pin 9. This capacitor draws current during start-up, lowering the duty cycle of the drive pulse. The internal oscillator frequency is set by R4105 and C4107.

Run Mode

When the system control IC (U3101) receives a turn-on command, pin 38 is pulled high to activate the on/off switch circuit (Q4306 on, Q4304 on, Q4301 off and Q4305 on) and supply +9 volts to the horizontal section of the one-chip (U1001 pin 26). U1001 supplies drive pulses to turn on the horizontal deflection circuit (Regulated B+ and +15V supplies for the horizontal circuit are already present). When the horizontal circuit is operational, the +26V supply from the flyback secondary turns on the +12V (Q4702), +9V (Q4704) and +5V (Q4703) run supplies to power the remainder of the Main PCB.

Regulation during the run mode is achieved by sampling the Regulated B+ (R4114, R4148, R4116 and R4115) and generating a horizontal rate PWM feedback signal (Q4105, Q4106 and Q4107), which is fed to pin 2 of U4101. A horizontal pulse from the flyback (T4401 pin 7) is used to turn Q4106 on at a horizontal rate; the "on" time of Q4106 is determined by the voltage at the collector of the error amp Q4105. If Regulated B+ decreases, Q4105 collector voltage decreases, the "on" time of Q4106 decreases and the "on" time of Q4107 decreases. This signal is inverted by T4101 so that the "on" time of the signal to U4101 pin 2 increases. In this way, the chopper transistor (Q4101) runs at horizontal rate, and the "on" time of the chopper transistor varies with the duty cycle of the feedback signal.

Switching transistor Q4109 defeats the feedback path when the instrument is turned off. This insures that no pulses from the horizontal circuit reach the regulator (causing erratic operation) after the instrument is turned off.

Overcurrent shutdown protection is provided by sampling the current through Q4101. The voltage across R4110 is divided and fed to U4101 pin 3. If this voltage exceeds the threshold level, the overcurrent shutdown logic disables the drive pulses until the voltage at pin 3 drops below the threshold.

Horizontal Deflection

Horizontal sync is derived from the luminance input to the one-chip (U1001-43 for TV Video, U1001-40 for External Video) via a sync separator internal to U1001. Horizontal deflection is locked to incoming sync by comparing the output of the sync separator with a feedback pulse from pin 7 of the flyback (AFC). The *Horizontal Phase* control (R4306) is used to shift the video signal with respect to the raster (horizontal centering).

The frequency of the horizontal VCO is determined by the crystal resonator Y4301, which resonates at 503kHz. The output of the VCO is fed to a countdown circuit, which provides a 15,734Hz drive waveform. This signal is amplified and leaves the one-chip at pin 23.

The horizontal drive signal passes through driver transistor Q4302 and is transformer-coupled (T4301) to the horizontal output device Q4401.

CIRCUIT OVERVIEW (Continued)

Power for the deflection circuits internal to U1001 is supplied by the +9V run supply, which is activated when the instrument is turned on. Power for the horizontal drive circuit (+15V supply) and the horizontal output device (Reg. B+) is available whenever the AC line is connected.

The horizontal output device switches to transfer power from the Regulated B+ supply to the secondary of the flyback (T4401). In addition to developing a feedback pulse for AFC (see above), the flyback generates high voltage for the picture tubes, a −12V supply, a +26V supply, a +200V supply, a filament pulse and a 90Vp-p pulse.

X-Ray Protection

The filament pulse from pin 5 of the flyback is rectified by CR4901 and applied to the cathode of zener CR4902 through a precision divider network. If the rectified voltage exceeds 10 volts, the zener conducts and the x-ray protect circuit at U1001 pin 22 is activated.

When active, the x-ray protect circuit disables horizontal deflection, causing the +26V flyback secondary supply to drop. Loss of the +26V supply results in loss of the +9V run supply (refer to **Main Power Supply** - Run Mode). When the +9V supply drops, the system control micro (U3101) responds by cycling the instrument off and on (refer to **System Control** - Fault Detect).

Pincushion Correction

Without correction, the raster would exhibit pincushion distortion (raster narrow at the center of the display and wide at the top and bottom of the display). The pincushion correction circuit uses a capacitor divider (C4401, C4402 and C4801) to vary the amplitude of the flyback pulse to the horizontal yoke. By controlling the discharging of C4801, the width of each horizontal line can be adjusted to eliminate distortion in the raster.

U4801 generates a horizontal rate PWM switching signal that turns Q4802 on and off. When the voltage at U4801-2 (derived from the 90Vp-p pulse at T4401 pin 7) exceeds the reference voltage at U4801-3, the output goes high, turning on Q4802. Whenever Q4802 is on, C4801 is discharged, lowering the voltage at the junction of C4401/C4402 so that more of the flyback pulse reaches the yoke (width increased). Whenever Q4802 is off, Q4801 is allowed to charge, raising the voltage at the junction of C4401/C4402 so that less of the flyback pulse reaches the yoke (width decreased).

In order to offset pincushion error, a vertical rate parabola must be added to the horizontal rate waveform at U4801-2. The vertical yoke return signal (saw + parabola) is fed to the emitter of Q4801. A vertical saw waveform is supplied to the base of Q4801 and the resulting vertical parabola at the collector is buffered (Q4803) and added to the horizontal waveform at U4801-2. The *E/W Pin Amp* control (R4805) is used to set the amount of vertical rate correction.

Width control is accomplished by adding a DC voltage to the vertical and horizontal waveforms at U4801-2. This DC voltage is adjusted with the *Width* control (R4802).

When Q4802 is turned on, energy is stored in L4803 (pins 4 and 5). When Q4802 is turned off, this energy is transferred into the +26V supply (through CR4803) and the +15V supply (through CR4806).

Switching transistor Q4804 is used to turn off the pincushion PWM (U4801) when the instrument is turned off. In this way, the ringing of the horizontal circuit (after it is turned off) does not affect the operation of the main power supply regulator as it switches to standby mode.

High Voltage Regulator

Without correction, high voltage would decrease as beam current increases. This would cause an increase in raster size that would be noticeable to the viewer, because any error on the picture tube face is magnified by the lens and mirror. To offset this effect, the high voltage regulator circuit compares a sample of high voltage to a reference voltage and provides a boost whenever high voltage starts to drop.

A sample of high voltage (approx. 60 volts) is supplied to the HV Splitter PCB from the High Voltage Splitter. This signal is impedance-matched and buffered to provide a usable HV sample to the High Voltage Regulator PCB. The sample is routed through a precision divider network to provide an error signal for the comparator (U4751). CR4751 supplies the reference voltage for the inverting input of U4751. The output of the comparator is inverted (Q4753) and applied to the B+ modulator transistors (Q4754 and Q4755). Controlling the turn-on and turn-off of these transistors controls the B+ available to the MOSFET switch Q4752.

The MOSFET switch (Q4752) is turned on during retrace by Q4751. When Q4752 is turned on, a pulse is developed across the primary of T4751. This pulse is coupled through T4751 and added to the bottom of the high voltage winding of the flyback. The amplitude of the pulse (amount of correction) is determined by the B+ voltage available to Q4752 through Q4754 and Q4755.

Vertical Deflection

The vertical reset pulse from U1001-29 turns on Q4505 to reset the vertical ramp generator Q4506. When Q4505 turns on (vertical retrace), ramp capacitors C4518 and C4519 are discharged through R4504. When Q4505 is turned off (vertical trace), C4518 and C4519 begin to charge through R4507. The supply voltage for the ramp capacitors is generated by the flyback, rectified by

CIRCUIT OVERVIEW (Continued)

CR4502, and filtered by C4504. The *Vertical Height* control (R4522) adjusts the supply voltage to the ramp capacitors to set the height of the display. R4521 and R4525 provide a feedback path to alter the charge time of C4518 so that the ramp at the collector of Q4506 is slightly nonlinear (to offset the nonlinearity of the DC feedback path from the yoke). This nonlinear vertical ramp is fed to pin 3 of the vertical drive IC (U4501).

Current for vertical deflection is provided by a horizontal rate pulse from the flyback. During horizontal retrace, T4401-2 is positive with respect to T4401-3. The current path is from T4401-2, through the vertical yoke winding, S-shaping cap C4503, current sense resistor R4505 and CR4504 to T4401-3. This path provides current to deflect the beam upward (positive current). During horizontal trace, T4401-2 is negative with respect to T4401-3. The current path is from T4401-3, through SCR501, R4505, C4503 and the vertical yoke winding to T4401-2. This path provides current to deflect the beam downward (negative current). To provide vertical deflection, the net current through the yoke is controlled by turning the SCR on and off during horizontal trace. If the SCR is off most of the time, negative current (from T4401-2 to T4401-3) cannot flow, and the net current through the yoke is positive, deflecting the beam upward. If the SCR is on most of the time, negative current (through SCR501) exceeds positive current (through CR4504), and the net current through the yoke is negative, deflecting the beam downward.

The vertical drive IC (U4501) is used to control the "on" time of SCR501. The vertical ramp (positive slope) from Q4506 is applied to the noninverting input of U4501 (pin 3). A horizontal ramp (negative slope) is applied to the inverting input of U4501 (pin 2). The horizontal ramp is obtained by rectifying (CR4501) and filtering (C4522) the horizontal pulse from T4401 pin 7. Whenever the voltage at pin 3 exceeds the voltage at pin 2 (whenever the horizontal ramp decreases below the level of the vertical ramp), the SCR is turned on, allowing current to flow from the yoke through the SCR (negative current). At the beginning of vertical scan (top of display), the vertical ramp is low and the SCR is off most of the time because the horizontal ramp drops below the vertical ramp only near the end of horizontal scan. In this case, net yoke current is positive. At the middle of vertical scan (center of display), the vertical ramp is at its midpoint and the SCR is on about half the time because the horizontal ramp drops below the vertical ramp about halfway through horizontal scan. In this case, net yoke current is zero. At the end of vertical scan (bottom of display), the vertical ramp is at its peak and the SCR is on most of the time because the horizontal ramp drops below the vertical ramp near the beginning of horizontal scan. In this case, net yoke current is negative. During vertical retrace the SCR is kept turned off to allow scan to return to the top of the display. Note that CR4504 conducts only during horizontal retrace and SCR501 conducts only during horizontal trace.

Transistor Q4507 is turned on by the system control micro (U3101 pin 36) during channel change and autoprogramming. During channel change, vertical sync is not available and the countdown circuit internal to the one-chip (U1001) reverts to its default setting. In this mode, the on-screen display moves up higher in the display. By limiting the maximum voltage at U4501-2, Q4507 forces the on-screen display back to its original position until valid sync is detected.

System Control

All system functions are controlled by the system control micro (U3101). The following is a complete list of system control inputs and outputs:

Pin 1 - Reset

When AC power is applied (instrument plugged in), + 15V and + 5V standby supplies are generated and fed to the system control micro. The + 5V supply reaches its operating voltage first, and is fed directly to pin 19 to turn on the micro. As the + 15V supply rises, CR3101 (5.6V zener) keeps the reset pin below its upper threshold (2.5V) until the + 5V supply turns on the micro. When the + 15V supply reaches its operating voltage, + 5V is applied to the reset pin and U3101 is reset.

R3116 and CR3102 connect the 4MHz oscillator to the reset circuit so that the oscillator is defeated when the reset line drops (instrument unplugged). This conserves charge on the + 5V STBY supply in order to retain memory as long as possible. Minimum memory retention time is specified at 10 seconds.

Pin 2 - Fault Detect

This input signal informs the micro of a system fault, either due to loss of the + 9V run supply (XRP fault) or due to a DC fault in the audio output circuit.

If an XRP fault occurs, horizontal deflection is interrupted and the + 26V secondary supply drops. This turns off the + 9V run supply and pin 2 of the micro goes low. The micro responds by turning the instrument off and trying to restart (cycling off for 2 seconds, on for 1/4 second) until the fault is removed or AC power is disconnected.

If the DC voltage at either of the speaker outputs exceeds + 2 volts or − 2 volts, the DC detector circuit (on the Digital Audio PCB) is activated and pin 2 of the micro goes low. The micro responds by cycling the instrument off and on (see above) until the fault is removed or AC power is disconnected.

Pin 3 - IR Input

The IR remote signal is received by CR3401, then amplified and demodulated by the IR preamp (U3401). This signal is inverted by Q3401 and 5Vp-p pulses appear at pin 3 of the micro.

CIRCUIT OVERVIEW (Continued)

Pin 4 - Vert. Kill/Degauss

This pin is not used on the projection TV chassis since neither a vertical kill signal nor a degauss control signal is required.

Pin 5 - KS3
Pin 6 - KS2
Pin 7 - KS1
Pin 8 - KS0

With no customer controls pressed, these sense lines are pulled high by R3103, R3105, R3131 and R3132. When a key is pressed, a logic low from one of the scan lines appears at one of these inputs. Once a low is detected, the scan lines are toggled to identify which key is pressed.

Pin 9 - Aux 2
Pin 10 - Aux 1

These output lines are used to control the video input switch U1401. The output of U1401 (Switched Video) is selected according to the following table:

U3101-9	U3101-10	U1401-3 (Switched Video)
Logic 0	Logic 0	TV Video (from IF)
Logic 0	Logic 1	Aux 1 Video
Logic 1	Logic 0	Aux 2 Video
Logic 1	Logic 1	S-Video/"don't care"

Pins 9 and 10 are both high whenever the S-Video input is selected. When the Analog Comb (non-PIP) circuit is used, S-Video is selected by this switch. When the Analog Comb (PIP) circuit is used, S-Video is selected via Q6402,Q6403 and Q6404 on the PIP Adapter board, and logic state 1/1 becomes a "don't care" state. When the Digital Comb circuit is used, S-Video selection is performed by U6401 (on the Digital Comb PCB) under bus control; in this case, logic state 1/1 is also a "don't care" state.

Audio input selection is performed by U1600 (on the Digital Audio PCB) and is under bus control.

Pin 11 - KD1
Pin 12 - KD3/Tuning Sync

With no customer controls pressed, these drive lines are held low. When a key is pressed, one of the sense lines (pins 5 - 8) is connected to a drive line and is pulled low. Once a low is detected, the drive lines are toggled (@ approx. 200Hz) to identify which key is pressed.

If the Channel Down, Setup, Video or Audio key is pressed and held, both of the drive lines will continue to toggle after the key is decoded. If the Power, Volume Up, Volume Down or Channel Up key is pressed and held, the KD1 drive live line will continue to toggle, but the KD3 drive line will be held low after the key is decoded.

Pin 13 - Enable

This line is pulled low when device address information is being transmitted on the Data line. The Enable line is then pulled high when command data is being transmitted, then pulled low for 8μsec when data transmission is completed. Enable is logic high when inactive.

A transistor clamp (Q3303) is used to keep the Enable line low until the +5V run supply reaches its operating voltage.

Pin 14 - Data

This line contains device the address, command and status information sent to the EEPROM, the Digital Audio processor, the Digital Comb processor and the PIP processor. Data is logic high when inactive.

Pin 15 - Clock

This line synchronizes the the transfer of data between devices and is active only during data transmission. Clock is logic high when inactive.

Pin 16 - Blue OSD
Pin 17 - Green OSD
Pin 18 - Red OSD

To produce an on-screen display character, one or more of the OSD outputs is pulled high at the appropriate time. The OSD outputs are logic low when inactive.

Pin 19 - VDD
Pin 20 - VSS

The system control microprocessor is powered from the +5V STBY (standby) supply; pin 20 is the ground return.

Pin 21 - Blanking

This line goes low to produce the black border around the OSD characters. Blanking is logic high when inactive.

Pin 22 - System Reset

This line is used to reset the Digital Audio processor, the Digital Comb processor and the PIP processor when the instrument is turned on.

During standby mode, System Reset is held low. When the instrument is turned on, pin 22 is pulled high after a one second delay to reset the peripheral processors, after which time system communications may begin.

Pin 23 - H Sync
Pin 24 - V Sync
Pin 25 - R1
Pin 26 - VCO

The inputs at pins 23 and 24 provide horizontal and vertical timing for the OSD signals (pins 16, 17 and 18). Pins 25 and 26 are external control pins for the phase-locked loop.

Pin 27 - Speakers Off

This line is pulled high to mute the internal (TV) speakers during instrument turn-on and turn-off. Pin 27 is also activated via the Audio menu to turn off the internal speakers.

Pin 28 - Mono/RF Switch

This line is used to select the tuner RF input (Antenna A or Antenna B). A logic low selects Antenna A; a logic high selects Antenna B.

Pin 29 - TV Pix

This line is used to select the appropriate amplification and filtering of luminance and chrominance signals (internal to U1001) by shifting the DC voltage at pin 31 of U1001.

When the video from the IF (TV Video) is selected, pin 29 goes high and the DC level at U1001-31 increases to approx. 4.5 volts. A logic circuit internal to U1001 responds by routing the chroma signal through a narrow BPF and selecting the luma signal at pin 43 (2Vp-p luma).

When an external video signal (Aux 1, Aux 2 or S-Video) is selected, pin 29 goes low and the DC level at U1001-31 decreases to approx. 1.5 volts. A logic circuit internal to U1001 responds by routing the chroma signal through a wideband filter and selecting the luma signal at pin 40 (1Vp-p luma).

Pin 29 is also used in instruments *without* Pix-In-Pix (CTC169BL,BN) to defeat the IF circuit when an external video input is being viewed. When an external video input is selected, pin 7 (IF AGC) of U1001 is pulled low. This prevents TV Video information from contaminating the external video signal.

Pin 30 - Volume/SRS/Graphic EQ

This output is not used on CTC169 projection TV.

Pin 31 - Tint
Pin 32 - Color
Pin 33 - Contrast
Pin 34 - Brightness
Pin 35 - Sharpness

Pins 31 through 35 are PWM (pulse width modulated) outputs that are filtered to produce variable DC control voltages for picture control. The *Sub-Brightness* control (R3346) is used to compensate for production tolerances by adjusting the range of the brightness control.

Pin 36 - Channel Change

This line goes high during channel change and during autoprogramming, killing the video input to U1001 (forcing the horizontal oscillator to free-run) and clamping the horizontal ramp input to the vertical drive IC (U4501). This is done to maintain a stable OSD display during channel change and autoprogramming (refer to **Vertical Deflection**).

Pin 37 - AFT

This input is used to detect AFT crossover during the tuning algorithm. The voltage at pin 37 can vary between 0 and 5 volts, and crossover occurs at 2.5 volts.

Pin 38 - TV On

This line is held low during standby. When a turn-on command is received, this line is pulled high to start the horizontal deflection circuit.

Pin 39 - 4MHz Oscillator Out
Pin 40 - 4MHz Oscillator In

A 5Vp-p 4MHz signal is present whenever AC power is applied. Pin 39 should be used for monitoring the oscillator.

Tuner (MTP-M-2030)

The MTP-M-2030 tuner includes three antenna connections (ANT A, ANT B and CONVERTER OUT) which are selected via the SETUP menu and controlled by the system control micro (U3101). When ANT A is selected, U3101 pin 28 is pulled low. This pulls pin 10 of the tuner low, and the signal at the ANT A input is fed to the RF tuning section of the tuner. At the same time, the signal at the ANT B input is routed to the CONVERTER OUT connector. When ANT B is selected, U3101 pin 28 (and pin 10 of the tuner) goes high, and the signal at the ANT B input is fed to the RF tuning section of the tuner.

Frequency synthesis and band switching circuits are contained within the tuner. Tuning commands are generated by the system control micro; data and clock signals appear at pins 7 and 8 of the tuner. The RF AGC signal enters the tuner at pin 1, and the IF output leaves the tuner at pin 3.

Video IF

The 4.5MHz IF signal from pin 3 of the tuner is amplified (Q2301), filtered (SF2301) and applied to the differential input of the one-chip (U1001 pins 9 and 10). U1001 generates baseband video (pin 45), AFT (pin 50) and AGC (pin 2) signals. The AFT signal is sent to the system control IC (U3101 pin 37) to control fine tuning of the incoming RF signal. The AGC signal is sent to the tuner (pin 1) to optimize the gain of the RF amplifier stages.

The baseband video signal is buffered (Q2302) and 4.5MHz FM audio information is removed (CF2301). The video signal (referred to as TV Video) is buffered by Q2701 and sent to video switch U1401 (all models) and the PIP module (CTC169BM,BP only).

CIRCUIT OVERVIEW (Continued)

Audio IF

The baseband video signal at U1001 pin 45 also contains 4.5MHz FM audio information. The baseband signal is passed through a 4.5MHz filter (CF1201) and the resulting FM audio signal is fed back to U1001 at pin 51. The signal is limited and detected by U1001 and wideband audio (WBA) appears at pin 52. Baseband audio is buffered by Q1201 and the *Wide Band Audio* control (R1204) is adjusted for the proper signal level at the input of the Digital Audio circuit.

Luminance Processing

The luminance signal from either JS6400-7 of the Digital Comb board (CTC169BL,BP), JS6400-7 of the PIP Adapter board (CTC169BM) or U2601-7 (CTC169BN) is fed to pins 40 and 43 of the one-chip (U1001). Due to the design of the IC (the IC was designed to be capable of providing 2X gain for an external video signal), both a 2Vp-p signal and a 1Vp-p signal must be provided to the IC. The 2Vp-p signal appears at pin 43 and Q2707 provides a 1Vp-p signal at pin 40. During channel change and during autoprogramming, pin 29 of U3101 (TV Pix) pulls the TV Video input (U1001-43) high to prevent video from reaching the sync separator (see **System Control**).

Contrast Control

The luminance signal is fed to an amplifier whose gain is controlled by a DC voltage generated by the system control IC (contrast control). This DC voltage determines the peak-to-peak amplitude of the luminance signal at pin 38. This control voltage also affects the gain of the chrominance input amplifier at pin 31 (color tracking).

To prevent picture blooming on extremely bright scenes (high average beam current), a beam limiter circuit (Q2703) pulls down the contrast control voltage (and the brightness control voltage) to reduce beam current.

To prevent picture distortion due to high white peaks in the luminance signal, a peak limiter circuit (Q2704 and Q2705) pulls down the contrast control voltage to limit the peaks.

Sharpness Control

The luminance signal from pin 38 passes through delay line DL2701 to compensate for chroma pocessing delays. The *Contrast Preset* control (R2730) is used to set the amplitude of the luminance signal at the color driver transistors (Q2903, Q2904 and Q2905).

The signal is then buffered and filtered to separate the high-frequency and low-frequency components. Low-frequency luminance returns to U1001 at pin 35. High-frequency luminance returns to U1001 at pin 34, along with a DC control voltage generated by the system control sharpness PWM (U3101 pin 35). This DC voltage controls the gain of the high-frequency luminance amplifier (internal to U1011) to adjust the amount of high frequency information in the luminance signal. The amplitude-adjusted high-frequency luminance signal and the low-frequency luminance signal are added and fed to the brightness control circuit.

Brightness Control

The luminance signal is then fed to the brightness control circuit, where a DC control voltage (generated by the system control brightness PWM at U3101 pin 34) is used to shift the DC level of the luminance with respect to blanking. The resulting signal is buffered (Q2911 and Q2906) and fed to the R/G/B Drive circuit.

Chrominance Processing

The chrominance signal from either JS6400-8 of the Digital Comb board (CTC169BL,BP), JS6400-8 of the PIP Adapter board (CTC169BM) or U2601-6 (CTC169BN) enters the one-chip at pin 31 and passes through the first chroma amp to a pair of bandpass filters. A narrow BPF is used when the source of the chrominance signal is video from the IF circuit. A wideband filter is used when the source of the chominance signal is video from an external input (Aux 1, Aux 2 or S-Video). The DC voltage at pin 31 controls a switch which selects the properly filtered chrominance signal. This DC voltage is driven by the system control TV Pix line from U3101 pin 29 (see **System Control**).

The selected signal is routed through the second chroma amp to the color demodulator, which produces R−Y, G−Y and B−Y signals at pins 15, 17 and 18. The gain of the second chroma amp is controlled by both the color control voltage (generated by the system control color PWM at U3101 pin 32) and the contrast control voltage from U1001 pin 41.

The selected signal is also routed through a burst-keyed amp whose output is used to control the gain of the first chroma amp (ACC - Automatic Color Control) and the color killer circuit. The color killer circuit pulls down the color control DC voltage if incoming burst is too weak to produce a viewable picture.

The DC control voltage at pin 44 adjusts the hue (tint) of the demodulated color signal. The control voltage is generated by the system control tint PWM at U3101 pin 31. The *Tint Preset* control (R2816) is used to preset the tint control voltage when the customer tint control (Video menu) is at midrange.

The *Chroma Filter* control (R2802) is used to adjust the 3.58MHz oscillator and the chroma bandpass filters. The 3.58MHz oscillator can be accurately measured by forcing pin 44 to approx. 1.3VDC and measuring the frequency at the B−Y output (pin 18).

R/G/B Drivers

The R−Y, G−Y, B−Y and buffered −Y signals are fed to driver transistors Q2903, Q2904 and Q2905 to produce R, G and B signals. On-screen display information is added to the R/G/B signals via Q2908, Q2909 and Q2910.

The R/G/B signals are sent to the PTV Auxiliary PCB where they are routed to the three Kine Driver circuit boards.

Each color signal enters a Kine Driver board at pin 7 of J5001 (R, G or B). It is applied to the emitter of common base amplifier Q5001 to produce the voltage waveform that drives the picture tube. Switching transistors Q5002 and Q5003 are a part of the scan loss protection circuit (refer to **Scan Loss Protection**). The focus and screen voltages for all three tubes are supplied from the Focus/Screen assembly. The anode voltages for the three tubes supplied from the High Voltage Splitter assembly.

Video Input/Output Circuit

In addition to the video signal from the tuner (TV VIDEO), the CTC169PTV chassis is equipped to accept the following video inputs:

Auxiliary Video Input 1 (AUX 1)
Auxiliary Video Input 2 (AUX 2)
S-Video Input (S-LUMA and S-CHROMA)

This chassis is also equipped to provide the following video outputs:

Selected Video Output (SELECTED VIDEO)

Analog Comb, Non-PIP Instruments (CTC169BN)

The function of the Video Input/Output circuit is to provide S-CHROMA and SWITCHED VIDEO signals directly to the signal processing circuit. SWITCHED VIDEO can be either TV VIDEO, AUX VIDEO 1, AUX VIDEO 2 or S-LUMA (selected by U1401) and is sent to the analog comb filter to provide luminance and chrominance signals to the one-chip U1001 (S-CHROMA is fed directly to the one-chip via Q1404 and Q1405, which are switched by U1401). The SWITCHED VIDEO signal also appears at the SELECTED VIDEO output.

Analog Comb, PIP Instruments (CTC169BM)

The switching circuits for selecting the desired video signals are distributed among several circuit areas. The function of the Video Input/Output circuit is to provide S-LUMA, S-CHROMA and SWITCHED VIDEO signals to the PIP Adapter board and the PIP module. SWITCHED VIDEO can be either TV VIDEO, AUX 1 VIDEO or AUX 2 VIDEO; this signal, along with a second TV VIDEO signal is sent to the PIP module, which selects the SELECTED VIDEO signal and the PIP VIDEO signal (small pix). Note that this arrangement allows the TV VIDEO signal to be viewed as both the big pix and small pix; this is useful when aligning the PIP module to match the color temperature of the small pix to the big pix.

The SELECTED VIDEO signal is sent to the SELECTED VIDEO output jack and to the analog comb filter (U2601), which separates the video signal into the luma and chroma components (MAIN VIDEO) necessary for the PIP module to create a pix-in-pix display. At this point, customer selection may allow the S-VIDEO signals (S-LUMA and S-CHROMA) to be sent back to the PIP module instead of the combed luma and chroma signals. This allows the S-VIDEO input to be viewed as the big pix (MAIN VIDEO). Note that the S-VIDEO signals cannot be directly used for the small pix; in order to view the S-VIDEO signal in the small pix, a normal video output from the S-VIDEO source must be connected to the AUX 1 input.

The PIP module then combines the selected signals and sends luminance and chrominance signals (containing MAIN VIDEO + PIP VIDEO) to the one-chip (U1001). Refer to **Pix-In-Pix Circuit** for details.

Digital Comb, Non-PIP Instruments (CTC169BL)

The switching circuits for selecting the desired video signals are distributed among several circuit areas. The function of the Video Input/Output circuit is to provide S-LUMA, S-CHROMA and SWITCHED VIDEO signals to the Digital Comb board. The S-VIDEO signals are sent directly to the Comb Filter board. SWITCHED VIDEO can be either TV VIDEO, AUX VIDEO 1 or AUX VIDEO 2 (selected by U1401); this signal is sent to the Digital Comb board and also appears at the SELECTED VIDEO output jack. The Digital Comb board selects the picture to be displayed on the screen (SWITCHED VIDEO or S-VIDEO) and provides luminance and chrominance signals to the one-chip (U1001). Refer to **Digital Comb Circuits** and **Pix-In-Pix Circuit** for details.

Digital Comb, PIP Instruments (CTC169BP)

The switching circuits for selecting the desired video signals are distributed among several circuit areas. The function of the Video Input/Output circuit is to provide S-LUMA, S-CHROMA and SWITCHED VIDEO signals to the Pix-In-Pix module and the Digital Comb board. The S-LUMA and S-CHROMA signals are fed directly to the Digital Comb board. SWITCHED VIDEO can be either TV VIDEO, AUX VIDEO 1 or AUX VIDEO 2 (selected by U1401); this signal, along with a second TV VIDEO signal is sent to the PIP module, which selects the SELECTED VIDEO signal and the PIP VIDEO signal (small pix). Note that this arrangement allows the TV VIDEO signal to be viewed as both the big pix and small pix; this is useful when aligning the PIP module to match the color temperature of the small pix to the big pix.

The SELECTED VIDEO signal is sent to the SELECTED VIDEO output jack and to the digital comb IC (U6401), which separates the video signal into the luma and chroma components (MAIN VIDEO) necessary for the PIP module to create a pix-in-pix display. At this point, customer selection may allow the S-VIDEO signals (S-LUMA and S-CHROMA) to be sent back to the PIP module instead of the combed luma and chroma signals; this allows the S-VIDEO input to be viewed as the big pix (MAIN VIDEO). Note that the S-VIDEO signals cannot be directly used for the small pix; in order to view the S-VIDEO signal in the small pix, a normal video output from the S-VIDEO source must be connected to the AUX 1 input.

The PIP module then combines the selected signals and sends luminance and chrominance signals (containing MAIN VIDEO + PIP VIDEO) to the one-chip (U1001). Refer to **Digital Comb Circuits** and **Pix-In-Pix Circuit** for details.

Digital Comb Circuits

In addition to the digital comb filter circuit, the Digital Comb PCB contains white stretch, black stretch, S-video switching and pix-in-pix (PIP) interface circuits. The following descriptions cover the CTC169BL chassis (non-PIP). Differences between the CTC169BL and CTC169BP (PIP) chassis' are covered at the end of this section.

Digital Comb Filter

The SWITCHED VIDEO signal from U1401 enters the Digital Comb board at JS6400 pin 1. The signal is buffered (Q6403), filtered (L6403, C6412) to prevent aliasing, and fed to pin 29 of the Digital Comb IC (U6401). The video signal is digitized and combed to produce separate luminance and chrominance signals. The luma and chroma signals are converted from digital to analog and appear at pins 33 and 9, respectively.

S-Video Switching

The digital comb IC (U6401) has provisions to switch between the combed luma/chroma signals and external luma/chroma signals from the S-Video input. The combed signals reenter the IC at pins 35 and 7; the S-LUMA and S-CHROMA signals enter the IC at pins 39 and 3. Switching is performed inside U6401 on instructions from the system control micro (U3101); the selected signals appear at pins 31 and 11. The chroma signal is buffered (Q6402, Q6414) and sent to the Main PCB via JS6400 pin 8. The luma signal is processed by the white stretch and black stretch circuits, then sent to the Main PCB via JS6400 pin 7.

White Stretch

The purpose of the white stretch circuit is to enhance the contrast of low brightness scenes. Whenever the average picture level (APL) is below 30IRE, the gain curve of the circuit is nonlinear. For signal levels below 50IRE, the slope of the gain curve is greater than one (0IRE in yields 0IRE out, 50IRE in yields 62IRE out). For signal levels above 50IRE, the slope of the gain curve is less than one (50IRE in yields 62IRE out, 100 IRE in yields 100 IRE out). Whenever the APL is greater then 30 IRE, the gain curve of the circuit is linear (no stretch occurs).

The nonlinear gain characteristic is accomplished by creating two signal paths (Q6404 and Q6405) and controlling how these two signals are mixed. When the signal level is less than 50IRE, both Q6404 and Q6405 are conducting and no current flows through R6438. The signals from Q6404 and Q6405 pass through QQ6407 and Q6408, and are mixed by Q6406, Q6409, Q6410 and Q6411. When the signal level is greater than 50IRE, Q6405 is turned off and Q6404 provides a signal to both Q6407 and Q6408. These signals are mixed in the same manner (as signals below 50IRE), but the overall gain of the circuit is changed to affect the slope of the gain curve. The resultant luminance signal is buffered (Q6412) and fed to the black stretch circuit.

Black Stretch

The purpose of the black stretch circuit is to enhance the contrast of high brightness scenes. Whenever the average picture level (APL) is high, the gain curve of the circuit is nonlinear. For signal levels below 50IRE, the slope of the gain curve is greater than one (12IRE in yields 0IRE out, 50IRE in yields 50IRE out). For signal levels above 50IRE, the slope of the gain curve is one (50IRE in yields 50IRE out, 100 IRE in yields 100 IRE out). In this manner, the dark portions of a high brightness scene are driven farther into black (in some cases, below 0IRE). Whenever the APL is low, the gain curve of the circuit is linear (no stretch occurs).

Black stretch is performed by U6402, and the enhanced signal appears at pin 5. Due to the fact that some portions of the signal are driven below 0IRE, a sync correction circuit (Q6423, Q6427, Q6428 and R6488) is used to pull the sync portion of the luma signal down to −80IRE. The luminance signal is then buffered (Q6424) and sent to the Main PCB via JS6400 pin 7.

Non-PIP Signal Flow

SWITCHED VIDEO (TV VIDEO, AUX1 VIDEO or AUX2 VIDEO) from U1401 is sent to the digital comb IC via JS6400 pin 1. The Digital Comb IC selects (via system control commands) which signal (SWITCHED VIDEO or S-VIDEO) to be used for the main picture (MAIN VIDEO). MAIN VIDEO (as luma and chroma signals) is sent back to the Main PCB to be processed by the one-chip and displayed on the screen. The SWITCHED VIDEO signal is sent to the Selected Video output (SELECTED VIDEO) via R1434 in the Video In/Out circuit of the Main board.

PIP Signal Flow

Several jumpers are added to or deleted from the Digital Comb board to accomodate the Pix-In-Pix module. All signals used by or generated by the PIP module pass through the Digital Comb board.

SWITCHED VIDEO (TV VIDEO, AUX1 VIDEO or AUX2 VIDEO) from U1401 is sent to the PIP module, along with a separate TV VIDEO line. The PIP module selects (via system control commands) which signal (SWITCHED VIDEO or TV VIDEO) to be used for the Selected Video Output (SELECTED VIDEO) and the small picture (PIP VIDEO). SELECTED VIDEO is sent to the Digital Comb board to be processed; at this point, the Digital Comb IC selects (via system control commands) which signal (SELECTED VIDEO or S-VIDEO) to be used for the main picture (MAIN VIDEO). MAIN VIDEO (as luma and chroma signals) is sent back to the PIP module and mixed with PIP

Continued ➡

CIRCUIT OVERVIEW (Continued)

VIDEO to create luma and chroma signals for the display.

Pix-In-Pix Circuit

The SPIP module produces SELECTED VIDEO and PIP VIDEO signals and, via the fast switch IC (U8205), mixes PIP VIDEO with the MAIN VIDEO signal (from either the Digital Comb board or the analog comb circuit) for viewing. The MAIN VIDEO Y/C signals pass through the module relatively unaffected, while the PIP VIDEO signal is derived from digitizing the small pix video source. The module selects either the MAIN VIDEO Y/C signals or the digitized Y/C signals from the PIP processor (MAIN VIDEO + PIP VIDEO) to produce the picture on the screen.

Input Selection and Y/C Separation

This stage selects the desired video source to fill the big and small pix areas of the screen. The TV VIDEO and SWITCHED VIDEO inputs are composite video signals and must be separated into component luminance and chrominance signals. The SELECTED VIDEO (big pix) Y/C separation is performed by the digital comb IC on the Digital Comb board (or the analog comb IC on the Main board) and returns as MAIN VIDEO, while the PIP VIDEO signal is separated into Y and C components within the SPIP module.

Y/C to R – Y/B – Y Decoder

The insert (PIP VIDEO) luma and chroma signals enter the decoder stage (U8301) for conversion into R – Y and B – Y color difference signals, which are applied to the PIP Processor U8501. Composite sync is separated from the luminance signal and is applied to the H/V processor (U8503). Note that the PIP VIDEO luminance (Y) signal is applied directly to the PIP Processor.

3.58 MHz Oscillator - U8401

The 3.58 MHz oscillator provides a continuous 3.58 MHz signal to the encoder stage and to the PIP processor. The oscillator is locked to the color burst of the big pix (MAIN VIDEO) chroma signal. The encoder chip (U8402) uses the signal to produce the 3.58 MHz chroma signal for the output stage.

H/V Sync Signals

The horizontal and vertical sync outputs of the H/V processor stage are locked to the composite sync output of the decoder stage. The H/V processor free runs in the absence of composite sync to maintain H and V pulses to the PIP processor. These sync signals are used by the PIP processor to time the writing of insert pix video information to the VRAM.

Horizontal and vertical sync pulses from the deflection circuit (Main board) are also applied to the PIP Processor. The PIP processor contains a voltage-controlled 20MHz oscillator to synchronize its internal timing with external horizontal sync signals. When the small pix is turned on, horizontal sync from the chassis deflection circuit is compared to an internally generated phase reference to produce the error voltage for the VCO.

The horizontal blanking and vertical reset signals from deflection are also used by the PIP processor as timing signals to read small pix information from the VRAM.

PIP Processor (U8501)

The A/D converter within the PIP processor converts the analog Y, B – Y, and R – Y signals into digital information. The big pix (MAIN VIDEO) chroma signal is used as a reference to establish the chroma level for the small pix.

The digital processing stage receives the digital video information from the A/D converter and stores two fields of video into the VRAM U8502. Once in RAM, the digital data can be recalled and manipulated by the digital processing stage.

The control stage receives commands from the control micro U8901 through the three wire serial communications bus (PIP Clock, PIP Data, and PIP Enable). The control stage manages the functions of the digital processing stage to produce the various PIP features and functions. The initial PIP commands come from the system control micro U3101 on the Main circuit board.

The manipulated digital data from the digital processing stage enters the D/A converter to produce the analog Y, R-Y and B-Y signals that are fed to the output stages of the SPIP module. These signals contain the information for the small pix (PIP VIDEO). During full field effects such as freeze or zoom, these signals are used to produce the picture on the entire screen.

R – Y, B – Y to Y/C Encoder (U8402)

The encoder chip (U8402) receives the Y, R – Y, B – Y, and G – Y (derived from R – Y and B – Y) signals from the PIP processor and produces a 3.58 MHz PIP chroma signal and a PIP luminance signal containing composite sync. The 3.58 MHz signal used for the R, G, B-Y to chroma conversion is the inverted FXTAL signal from U8401.

Fast Switch (U8205) and Output

The fast switch IC (U8208) takes the PIP VIDEO Y/C signals from the encoder and mixes them (by switching) into the big pix (MAIN VIDEO) Y/C signals to create the video signal that is viewed on the screen. The fast switch control line inserts (switches) each line of the small pix video into the appropriate line of the big pix video.

CIRCUIT OVERVIEW (Continued)

The fast switch is also responsible for clamping the back porch blanking level of the small pix luma signal to the blanking level of the big pix. The Y/C output of the fast switch is applied to the Y and C inputs of the one chip to produce the big and small pix images on the screen.

Stereo Audio Circuit

In addition to the wideband audio signal from the tuner (WBA), the CTC169PTV chassis is equipped to accept the following audio inputs:

- Auxiliary Audio Input 1 (used in conjunction with the AUX VIDEO 1 input and the S-VIDEO input)
- Auxiliary Audio Input 2 (used in conjunction with the AUX VIDEO 2 input)

This chassis is also equipped to provide the following audio outputs:

- Selected Audio Output (fixed line level)
- Hi-Fi Audio Output (volume-controlled)
- External Speaker Output

The operating range of the Digital Stereo Processor (U1600) is 0 volts (ground) to 5 volts (B+). Because of this, the WBA (wideband audio) and AUX (auxiliary input) signals are biased up to +2.5 volts at the inputs to the processor. The bias voltage is generated internally by the processor and appears at pin 14. The processor performs all stereo demodulation, signal selection and volume control functions; it receives instructions from the system control IC (U3101) via the DATA line.

The SELECTED AUDIO signals are fed directly to the Selected Audio Output jacks on the rear panel. The HI-FI AUDIO signals are buffered (Q1413 and Q1414) and appear at the Hi-Fi Audio Output jacks on the rear panel.

The HI-FI AUDIO signals are also fed to a pair of 10 watt amplifiers (U1901 and U1902) to drive both the internal speakers and the external speakers. Selection of Internal or External speakers is performed by a switch on the rear panel.

A fault detect circuit is employed to prevent speaker and power amp damage due to excessive DC voltage. If the DC voltage at the Right speaker output goes positive, Q1903 turns on, lowering the voltage at the base of Q1902. This turns on Q1902, which raises the voltage at the base of Q1907. When Q1907 turns on, the system control micro responds by cycling the instrument off and on (refer to **System Control** - Fault Detect). If the DC voltage at the Right speaker output goes negative, Q1904 turns on, raising the voltage at the base of Q1907. When Q1907 turns on, the system control micro responds by cycling the instrument off and on (refer to **System Control** - Fault Detect). In the same manner, Q1905 and Q1906 provide protection from excessive DC voltage at the Left speaker output.

A muting circuit (Q1110 - Q1115) is provided to pull both the SELECTED AUDIO and HI-FI AUDIO lines low during instrument turn-on and turn-off. This eliminates any transients on the audio lines when the instrument is turned on or off. In addition, the power amplifiers (U1901 and U1902) are disabled via Q1901 (SPEAKER OFF line) during instrument turn-on and turn-off. The SPEAKER OFF line can also be used to turn off the internal and external speakers so that the SELECTED AUDIO OUT signal can be used alone.

Low Level Attenuator

In some instruments, an attenuator circuit is used to reduce low-level noise. The attenuator circuit (Q1601, Q1102 and Q1103) reduces the signal level at the HI-FI AUDIO outputs when volume is set below midrange. When volume is set to midrange or above, the system control micro instructs the digital audio processor to generate a 315kHz square wave at pin 4 (LOOP OUT). This signal is filtered to produce a DC voltage which turns on Q1601. This turns off Q1102 and Q1103, allowing the HI-FI AUDIO signals to pass unattenuated. At low volume levels, the 315kHz square wave is disabled, Q1601 turns off, Q1102 and Q1103 turn on and the HI-FI AUDIO signals are attenuated.

Dynamic Noise Reduction (DNR)

In some instruments, a dynamic noise reduction circuit is used to reduce low level noise. This circuit consists of a pair of gain-controlled filters which are used to reduce high frequency noise when signal level is low. The circuit monitors signal level at the Left and Right Selected Audio lines; when signal level is high, no filtering occurs. When signal level drops, the DNR circuit filters the Left and Right HiFi Audio lines to reduce background noise.

PTV Auxiliary Power Supply

A separate switching power supply is used to provide +15V, −15V, +45V and −45V supplies for the convergence circuits. The auxiliary power supplies are regulated by U7004 and power for these supplies is derived from the +150V Raw B+.

To prevent damage to the IC during start-up, Raw B+ is resistively dropped and clamped to 24 volts by R7136 and CR7074. When the instrument is turned on, horizontal pulses from the filament winding of the flyback (T4401 pin 5) pass through T7002 to cross the hot-cold barrier. The secondary pulses are rectified by CR7075, R7189 and C7102, and the resulting DC voltage turns on Q7050 and Q7051, supplying power to the IC. After the regulator starts, run voltage (approx. +15.5V) is supplied through CR7064.

The filament pulse is also applied to pin 4 of U7004 to lock the oscillator to horizontal rate. The IC produces 15Vp-p PWM (pulse width modulated) pulses which turn the output transistor (Q7037) on and off. Q7037 collector pulses are coupled through T7100 to four secondary windings and a feedback winding. Pulses at the four secondary windings are rectified to produce the +15V, −15V, +45V and −45V supplies.

CIRCUIT OVERVIEW (Continued)

Pulses from the feedback winding (T7100 pin 3) are rectified by CR7073 and C7077 and applied to the error amp inverting input (pin 2) through the *B+ Adjust* pot. The error amp produces an error signal whenever the inverting input deviates from 1/2VREF (2.5VDC). The *B+ Adjust* is adjusted for correct supply voltage at the +15V source.

Current through the output transistor (Q7037) is sampled by R7132 and a voltage representing the current is fed to pin 3 of the IC. Turn-on time of the PWM generator is synced to horizontal by the filament pulse (see above) and turn-off time occurs when the voltage at pin 3 equals the voltage produced by the error amp.

If the secondary supplies drop (load variation), the supplies draw more energy from T7100 and less energy is available to the feedback winding. The voltage at pin 2 decreases, the error voltage increases and the output transistor must remain on longer for the current sense voltage to reach the error voltage. If Raw B+ drops (line variation), the slope of the current sense waveform decreases and again the output transistor must remain on longer for the current sense voltage to reach the error voltage.

A slow-start circuit is used to allow the regulator to start properly. CR7058 and C7085 prevent the output of the error amp (pin 1) from going high and staying high until feedback pulses are generated. Instead, the error voltage (and the +5V reference voltage at pin 8) is used to charge C7065 to +5 volts. This keeps the width of the PWM output pulse narrow until feedback pulses are developed.

Scan Loss Protection

The PTV picture tubes are very easily damaged if horizontal or vertical scan is lost and beam current is concentrated on a small area of the phosphor. To prevent such damage, a circuit is included which monitors both horizontal and vertical scan, and cuts off the picture tubes if either is lost. This circuit operates not only in the event of a fault, but also operates during instrument turn-on and turn-off.

Horizontal Scan Detect

Horizontal scan is monitored by looking at the filament pulse from the flyback (T4401 pin 5). During normal operation, the peak voltage of the filament pulse is greater than the +10V reference. This turns on Q7043 and the pulse at Q7043-C is integrated and applied to the non-inverting input of the comparator (U7005 pin 3). During normal operation, the integrated voltage exceeds the reference voltage at the inverting input of the comparator (U7005 pin 3) and the comparator output is high (+15V). The purpose of Q7043 is to check the amplitude of the filament pulses and the purpose of the integrator (R7168 and C7091) is to check the frequency of the filament pulses. A high output at U7005 pin 1 turns on Q7044, which turns on Q7042 (assuming that vertical scan is present, causing the emitter of Q7042 to be high) and Q7048. During horizontal scan loss, the voltage at U7005 pin 3 floats low, the comparator output drops to ground, Q7044 and Q7042 turn off and Q7048 turns off, allowing its collector to go high.

Vertical Scan Detect

Vertical scan is monitored by looking at the voltage on the vertical "S" cap (C4503). This vertical signal is AC-coupled via C7105 and added to the +10V reference (CR7080) using Schottky diodes (because of their low forward voltage). As long as vertical scan is present, the voltage at the non-inverting input of the comparator (U7005 pin 5) exceeds the reference voltage at the inverting input (pin 6) and pin 7 is high (+15V). A high output at U7005 pin 7 turns on Q7042 (assuming that horizontal scan is present, causing the base of Q7042 to be low) and Q7048. During vertical scan loss, the voltage at U7005 pin 5 floats low, the comparator output drops to ground, Q7042 turns off and Q7048 turns off, allowing its collector to go high.

Scan Loss Operation

During normal operation, the collector of Q7048 is pulled low. This keeps Q5002 and Q5003 (located on the individual Kine Driver boards) turned off and the picture tubes operate normally. If either (or both) horizontal or vertical scan is lost, Q7048 is turned off (see above) and its collector is pulled high through CR5001 and R5005. Both Q5002 and Q5003 are turned on to reduce beam current; Q5002 turns off the video driver (Q5001) and Q5003 drives the G1 grid negative. CR5005 is used to prevent the G1 grid from rising too quickly when the scan resumes.

Dynamic Focus

The Focus grid of a picture tube is used to optimize the spot profile (size and shape) of the electron beam that strikes the phosphor. As the beam travels from the center of the screen to a corner, the spot profile changes, and the voltage required to focus the beam changes. The dynamic focus circuit modulates the focus voltage to keep spot size and shape more consistent.

The modulating waveform has two components: 1) a horizontal-rate parabola and 2) a vertical-rate parabola. The horizontal-rate parabola is obtained by integrating the horizontal yoke current (T7001 and C7080) and the vertical-rate parabola is generated on the Convergence PCB. The two waveforms are combined at Q7040 and sent directly to the Focus/Screen assembly.

Convergence Signal Generator

Since each color (red, green and blue) has a dedicated picture tube, convergence circuits are required to make the three rasters the same size and shape and align them on top of each other. The Convergence board includes circuits which generate various correction signals and circuits which combine these signals for proper overall correction.

Static Convergence Circuit

This circuit allows the customer to adjust static convergence (horizontal and vertical position of the red and blue rasters with respect to the green raster) via a subroutine in the VIDEO menu. Customer static convergence settings are stored in the system control EEPROM (U3200).

CIRCUIT OVERVIEW (Continued)

When the Convergence subroutine is employed, the system control micro (U3100) sends commands to the D/A converter (U8105). U8105 converts this data to four DC voltages (one each for red horizontal, red vertical, blue horizontal and blue vertical) which can be varied from 0 to 10 volts in 64 steps.

A quad op-amp (U8104) and a −5V regulator are used to shift the range of the D/A converter output so that step 32 (+5 volts) becomes 0 volts at the output of the op-amp, and the DC correction can vary above or below ground.

Dynamic Convergence Circuits

These circuits generate both horizontal- and vertical-rate signals which, when applied to the convergence yokes, adjust the size and shape of the individual rasters. The following signals are generated:

Vertical Sawtooth
Horizontal Sawtooth
Vertical Parabola
Horizontal Parabola
1/2 Horizontal Sawtooth
Vertical Sawtooth x Horizontal Sawtooth
1/2 Vertical Sawtooth x Horizontal Sawtooth
Vertical Sawtooth x Horizontal Parabola
1/2 Vertical Sawtooth x Horizontal Parabola
Vertical Parabola x Horizontal Sawtooth
Vertical Parabola x 1/2 Horizontal Sawtooth

When applied to the convergence yokes, these signals have the following effect on raster size and shape:

Signal	Correction
VSAW	Horizontal Skew Vertical Size
HSAW	Vertical Skew Horizontal Size
VPAR	Horizontal Bow Vertical Linearity
HPAR	Vertical Bow Horizontal Linearity
1/2 HSAW	Horizontal Linearity (Left Side)
VSAW x HSAW	Horizontal Keystone Vertical Keystone
1/2 VSAW x HSAW	Vertical Keystone (Bottom)
VSAW x HPAR	Vertical Pincushion
1/2 VSAW x HPAR	Vertical Pincushion (Bottom)
VPAR x HSAW	Horizontal Pincushion
VPAR x 1/2 HSAW	Horizontal Pincushion (Left Side)

Vertical Sawtooth Generator

A sawtooth waveform is developed across C8227 by charging the capacitor from the constant current source (Q8122) and discharging the capacitor through the reset switch (Q8121). Q8121 is reset (turned on) at a vertical rate by the vertical reset pulse from the one-chip (U1001 pin 29). This sawtooth waveform is buffered by Q8123 and Q8120 and sent to the convergence adjustment circuit to correct horizontal skew and vertical size.

Horizontal Sawtooth Generator

A sawtooth waveform is developed across C8130 by charging the capacitor from the constant current source (Q8107) and discharging the capacitor through the reset switch (Q8108). Q8108 is reset (turned on) at a horizontal rate by the filament pulse from the flyback (pin 5). This sawtooth waveform is buffered by Q8114 and Q8106 and sent to the convergence adjustment circuit to correct vertical skew and horizontal size.

Vertical Parabola Generator

The buffered sawtooth waveform at the emitter of Q8123 is fed to an inverting input of U8107, which integrates the sawtooth to obtain a parabolic waveform. To eliminate any DC offset in the parabola, the feedback capacitor (C8229) is discharged during retrace by the reset switch Q8138. The vertical parabola is buffered (Q8111) and clamped (Q8133) and sent to the convergence adjustment circuit to correct vertical linearity and horizontal bow.

Horizontal Parabola Generator

Two horizontal parabolas are generated, one of which (HPAR1) is used by the convergence modulators to develop additional correction waveforms. The other parabola (HPAR2) is fed directly to the convergence adjustment circuit.

In order to generate HPAR1, a sawtooth waveform is developed across C8236 by charging the capacitor from the current source (Q8136) and discharging the capacitor through the reset switch (Q8135). Q8135 is reset (turned on) at a horizontal rate by the filament pulse from the flyback (pin 5). Q8136 charge current is modified by the gull wing amp (Q8137) to give the sawtooth an "S" shaped correction. This sawtooth waveform is buffered by Q8128 and fed to an inverting input of U8107, which integrates the sawtooth to obtain a parabolic waveform. To eliminate any DC offset in the parabola, the feedback capacitor (C8231) is discharged during retrace by the reset switch Q8129.

HPAR2 is obtained by integrating the horizontal yoke current (T7001 and C8114). This parabola is clamped (Q8133) and sent to the convergence adjustment circuit to correct vertical bow and horizontal linearity.

1/2 Horizontal Sawtooth Generator

The buffered horizontal sawtooth at the emitter of Q8106 is AC coupled to Q8109 and Q8110, which clamp the signal so that only the negative-going portion of the signal remains. This correction signal is sent to the convergence adjustment circuit to correct horizontal linearity on the left side of the display.

Vertical Sawtooth x Horizontal Sawtooth Modulator

The buffered horizontal sawtooth from Q8106 and the buffered vertical sawtooth from Q8120 are combined in

CIRCUIT OVERVIEW (Continued)

U8103 to develop a horizontal sawtooth that is amplitude-modulated by a vertical sawtooth. This correction signal is buffered by Q8103 and sent to the convergence adjustment circuit to correct horizontal keystone and vertical keystone.

1/2 Vertical Sawtooth x Horizontal Sawtooth

The buffered vertical sawtooth from Q8120 turns on Q8105 during the positive-voltage half of the vertical sawtooth, causing the first half of the VSAW x HSAW waveform from Q8103 to be shorted to ground. This correction signal is buffered by Q8104 and sent to the convergence adjustment circuit to correct vertical keystone at the bottom of the display.

Vertical Sawtooth x Horizontal Parabola Modulator

The horizontal parabola from U8107 and the buffered vertical sawtooth from Q8120 are combined in U8101 to develop a horizontal parabola that is amplitude-modulated by a vertical sawtooth. This correction signal is buffered by Q8101 and sent to the convergence adjustment circuit to correct vertical pincushion.

1/2 Vertical Sawtooth x Horizontal Parabola

The buffered vertical sawtooth from Q8120 turns on Q8117 during the positive-voltage half of the vertical sawtooth, causing the first half of the VSAW x HPAR waveform from Q8101 to be shorted to ground. This correction signal is buffered by Q8104 and sent to the convergence adjustment circuit to correct vertical pincushion at the bottom of the display.

Vertical Parabola x Horizontal Sawtooth Modulator

The buffered horizontal sawtooth from Q8106 and the buffered vertical parabola from Q8111 are combined in U8102 to develop a horizontal sawtooth that is amplitude-modulated by a vertical parabola. This correction signal is buffered by Q8102 and sent to the convergence adjustment circuit to correct horizontal pincushion. R8193 is adjusted to obtain a symmetrical waveform.

Vertical Parabola x 1/2 Horizontal Sawtooth

The buffered VPAR x HSAW signal from Q8102 is AC coupled to Q8112 and Q8113, which clamp the signal so that only the negative-going portion of the signal remains. This correction signal is sent to the convergence adjustment circuit to correct horizontal pincushion on the left side of the display.

Convergence Adjustment Circuit

The dynamic correction signals described above are sent to a set of variable resistors where the signals are combined and routed to summing amplifiers (U8201, U8202 and U8203). Each variable resistor is connected in a divider network and connected to the inverting and noninverting inputs of the summer so that the amount and direction of the correction can be adjusted. Since the static correction signals are adjusted via software in the system control menu and can be either adjusted either positive or negative, each of these correction signals is connected directly to one input of a summer. The six outputs from the summer amplifiers are sent to the convergence output amplifiers on the PTV Auxiliary board to drive the convergence yokes.

Convergence Output Amplifier

The convergence output amplifiers convert the convergence correction signal from a voltage waveform to a current waveform suitable for driving the convergence yoke coils. There are six amplifiers - one each for red horizontal correction, red vertical correction, green horizontal correction, green vertical correction, blue horizontal correction and blue vertical correction. All of the amplifiers use an emitter follower push-pull output stage that uses ±15V supplies. The vertical amplifiers use additional output devices (top and bottom boost, which use ±45V supplies) in order to provide a large output voltage swing for fast retrace. The red and blue horizontal amplifiers use only a top boost device and the green horizontal amplifier requires no boost.

Red Vertical Amplifier

The convergence correction voltage is applied to the inverting input of error amp U7002 and the resulting error voltage is fed to Q7019. Since the base of Q7019 is at a fixed voltage reference, so is its emitter. As the error voltage at the output of the error amp changes, the current through Q7019 changes. Since the base of Q7020 is at a fixed voltage reference (CR7065 and CR7066), so is its emitter. This results in a constant current through R7069 that is divided between Q7019 and Q7020. As the current through Q7019 changes, so does the current through Q7020, and this current flows through CR7028, CR7029, CR7030 and R7071 to drive the output devices.

During scan, output current is provided by the ±15V supplies through R7074 and R7083. However, some of the correction signals require large changes in output current during retrace. To obtain fast current changes during retrace, the boost transistors (Q7021 and Q7024) are turned on to supply ±45V to the output transistors. As the output voltage increases towards +15V, the voltage at the base of Q7021 increases (via CR7033) until it is turned on, supplying +45V to Q7022. Similarly, as the output voltage decreases towards −15V, the voltage at the base of Q7024 decreases (via CR7036) until it is turned on, supplying −45V to Q7022.

Green and Blue Vertical Amplifiers

The green and blue vertical amplifiers function in a manner similar to the red vertical amplifier.

Red and Blue Horizontal Amplifiers

The red and blue horizontal amplifiers function in a manner similar to the red vertical amplifier, except that the signals used for horizontal correction are such that −45V supply boost is not required.

Green Horizontal Amplifier

The green horizontal amplifier functions in a manner similar to the red vertical amplifier, except that the signals used for horizontal correction are such that neither −45V nor +45V supply boost is required.

TROUBLESHOOTING HINTS

Troubleshooting Overview

CAUTION: The primary circuit of the Switched Mode Power Supply uses a "HOT" chassis configuration in all versions of this chassis series. Always use a Isolation Transformer when servicing this chassis.

When troubleshooting the B+ regulator circuit, it is necessary to remember that there are two distinct modes of operation. The switching regulator is used to provide both the standby and run supplies. If the standby operation is not functioning correctly, the the run mode cannot be checked. If the cold (isolated) ground regulator control circuit fails to operate, the regulator tries to provide the proper outputs using the standby control circuit, however the regulator can not respond quickly enough. The set will operate, but the picture size will change depending on the scene content.

Most problems in the switching regulator circuit will result in a dead set symptom. If the fuse is blown suspect a shorted chopper output transistor. When the chopper output is found to be shorted, it is necessary to check all of the secondary supplies for shorts to ensure that the replacement part does not fail as soon as power is applied.

If the standby supplies are present, a dead set symptom could still be caused by either the on/off circuit and system control microcomputer, or the horizontal deflection circuit.

B+ Regulator Standby Circuit

Dead Set

A quick check of the chopper power supply operation is to check the +5 volt standby supply. If this supply is present, the power supply is probably operating normally and the problem is located elsewhere on the chassis.

Standby Supply Missing—If the standby supplies are missing, first check the raw B+ input, line fuse and surge resistor.

Raw B+ Missing—If the raw B+ is missing at the collector of the chopper output transistor, the line fuse or the surge resistor is probably open. The usual cause is a shorted chopper output transistor. If the chopper transistor is shorted, check the current sense resistor, R4110, before restoring power to the instrument. In addition check the resistance of the secondary supply lines of T4102. The resistance to ground from the cathode of all secondary supplies except the +15 volt line should be greater than 100K ohms. The resistance from the cathode of the +15 volt supply (CR4118) should be greater than 4K ohms. If any resistance measurement is less than prescribed, correct the problem on that supply line before restoring power to the instrument.

Raw B+ Present—If the raw B+ is present at the collector of the chopper transistor but the standby supplies are missing, the problem could be overcurrent shutdown, overvoltage shutdown or a malfunction in the regulator control IC and associated components.

1. Measure the DC voltage to "HOT" ground at pin 5 of U4101. If the voltage is greater than 2.5 volts, the IC is in the overcurrent shutdown mode.
2. Measure the DC voltage to "HOT" ground at pin 16 of U4101. If the voltage is greater than 15 volts, the IC is in the overvoltage shutdown mode.
3. If the voltage at pin 16 of U4101 is greater than 10.5 volts and less than 15.0 volts, the IC should begin operation. An overcurrent condition could exist which does not cause the IC to latch off. Measure the voltage at pin 3 of U4101. The voltage is nominally less than 0.6 volts during normal operation. If the voltage is between 0.6 and 0.9 volts, the regulator cycles on and off. If the voltage is greater than 0.9 volts, the IC latches off until AC power removed.

Overcurrent Shutdown—An overcurrent shutdown condition is normally caused by a shorted or leaky component on one of the regulated power supply secondary supply lines. For example, a shorted horizontal output transistor or "S" shaping capacitor causes an overcurrent shutdown condition. Check the resistance of the secondary supply lines (T4102) to determine which supply line is defective. See *Raw B+ Missing* section for proper resistance measurements.

Overvoltage Shutdown—U4101 enters an overvoltage shutdown mode if the input Vcc at pin 16 rises above 15 volts. The IC stays off until AC power is removed.

Overvoltage conditions can be caused by an open in the standby adjust voltage input to the error amplifier or a spike on the Vcc line due to insufficient filtering. Remove AC power and discharge C4118. Check CR4106, C4102, R4117. R4102, R4113 and R4104. Restore AC power and check for normal operation. If the input voltage is still too high, suspect R4149 (defective or wrong value).

No Output from U4101—If there is no output from U4101 and there is no overcurrent or overvoltage condition, use an external power supply to confirm operation of the IC. Remove AC power and connect an external DC supply to pin 16 of U4101. Connect oscilloscope to pin 14 of U4101. Raise DC supply above +10.5 volts (DO NOT exceed +15 volts) and check for output waveform. If waveform is present check for drive pulse at base of chopper output transistor Q4101. As DC input voltage is varied between +10.5 and +15 volts the duty cycle of the output (drive) pulse should change.

If the output (drive) pulse is missing check for the 20kHz clock signal at pins 10 and 11 of U4101. If the clock signal is not present suspect defective C4107, R4105 or U4101.

Regulator Control Circuit—Confirm proper operation of the Standby circuit before attempting to diagnose a problem in the regulator control circuit.

If a problem in the regulator circuit is suspected, confirm the presence of the PWM feedback signal at pin 2 of U4101. If the signal is present, the regulator circuit is probably operating normally and the problem is in some other circuit area. If the PWM signal is missing check for the 26V p-p horizontal rate ramp at the base of Q4106. If the ramp is missing suspect a problem in the horizontal deflection circuit. If the ramp is present, check the DC voltage at the emitter of Q4106. If the voltage is Lo, suspect a defective Q4109 or a malfunction in the on/off circuit. Also the reference voltage circuit could be defective. If the voltage is approximately 5.0V suspect a malfunction in Q4106, Q4107 or the primary circuit of T4101.

X-Ray Protection Circuit

In this chassis the fault detector circuit, incorporated in the microcontroller (U3101), counts the number of times the fault detect input at pin 2 of the micro goes Lo. If the signal at pin 2 of the micro goes Lo three times within one minute, the micro keeps the set turned off until AC power is removed from the instrument.

A shutdown symptom can also be diagnosed as a dead set symptom. In addition, the fault detect circuit monitors the 10-watt per channel audio circuit for malfunctions in the audio output stage. A problem in the 10-watt per channel audio circuit can cause the same symptom as an X-Ray shutdown condition.

Begin troubleshooting by removing AC power from the instrument to reset the system control micro. Reapply AC power, turn the instrument on and listen for the high voltage to come up. In most cases of X-Ray shutdown, it is possible to hear the high voltage come up before the set shuts down. Shutdown malfunctions can be caused by an open retrace capacitor, a fault in the X-Ray detect circuit or a problem in the regulator circuit causing the reg. B+ to rise. The regulated B+ can be checked in the standby mode. It should be approximately 145 volts, if it is much higher correct the problem in the regulator circuit before trying to correct a malfunction in the horizontal deflection circuit.

If you suspect the set is shutting down due to a fault in the 10-watt per channel audio circuit, place the Int/Surr switch in the Ext/Surr position and disconnect any external speakers. Ground the base of Q1907 and turn the instrument on. If shutdown continues the fault is not in the audio circuit. If shutdown stops, immediately turn the set off and check the audio output stage for shorts or defective components. Before returning the instrument to the customer, be sure to place the Int/Surr switch in the internal position.

Pincushion Correction

Most malfunctions in the pincushion correction circuit result in the same symptom, the raster goes to maximum width and appears to be bowed out in the center. Begin troubleshooting by varying the settings of both the width and the E/W pin amp controls while observing the screen. If there is no change in the picture, the malfunction is most likely to be located after the pin amplifier IC (U4801). Suspect a shorted pin output transistor Q4802. If the picture changes but the raster cannot be set to the correct width or always appears bowed, suspect a malfunction in the vertical parabola, either Q4801, Q4803 or a leaky CR4805.

Vertical Deflection

Malfunctions in the vertical circuit can be grouped into two major categories, no vertical deflection and incorrect vertical deflection. The malfunctions covered in incorrect vertical deflection are; insufficient height, poor linearity and symmetry (vertical centering is off so the top half of scan is larger or smaller than the bottom half of scan).

No Vertical Scan—NOTE: Applying power to the instrument without the yoke attached will result in excessive power in the resistor (R4523) across the yoke, causing it to open. Always make sure the yoke is connected during troubleshooting.

Any malfunction which results in no gate drive to the SCR or an open SCR causes an overvoltage condition to C4503. There can be up to 160 volts across a part rated at 35 volts. Begin troubleshooting a malfunction of this type by removing jumper wire JW312 and replacing C4503. Connect an external DC power supply, adjusted to about 13 volts, to the high side of the vertical yoke winding (E4502). Apply AC power to the instrument and turn the set on. Connect oscilloscope probe to the gate of SCR501. Gate drive pulses should be present when the external power supply is at 13 volts. The gate drive pulses should stop when the external supply is reduced to about 10 volts, and should be continuous when the supply is adjusted above 13 volts. If these conditions can be achieved, suspect a defective SCR. If not, Suspect a defective component in the vertical ramp generator or horizontal ramp generator circuits. When the defective components have been located and the operating conditions with the external DC supply have been achieved, reconnect JW312 and remove the external power supply.

Insufficient Height—Problems in the height setting can be caused by either the power supply used to drive the vertical ramp circuit, the vertical ramp generator or the horizontal rate ramp at pin 2 of U4501. Check for change of the DC level at the cathode of CR4502 as the height control is rotated from minimum to maximum. It should vary between 22 and 33 volts as the height control is rotated. If the voltage is missing or incorrect, suspect R4522, CR4502 or C4504. If the DC voltage is correct, check for a vertical rate ramp signal at pin 3 of

TROUBLESHOOTING HINTS (Continued)

U4501. If the signal is missing or incorrect suspect Q4506, C4518 and C4519. Also check for horizontal pulse at pin 2 of U4501. If this pulse is missing or incorrect suspect defective CR4501, CR4512 or Q4507.

Linearity–Problems in linearity are most apparent when viewing a crosshatch pattern. For problems in linearity suspect C4503, C4520 and R4512.

Symmetry–Problems in symmetry appear as vertical centering problems. The raster is offset so that the top half of the raster is either larger or smaller than the bottom half. Suspect R4513, R4521 or R4525.

System Control

There are only a few quick checks to verify operation of the System Control Micro, U3101.

1. Check 4MHz oscillator at pins 39 and 40.
2. Check for a high on the reset line at pin 1.
3. Check for activity on the Clock line at pin 15. This line synchronizes the transfer of data between devices. The Clock line is not a continuous signal, it is only active during data transmissions. The line should pulse Lo about 4 times every second when no functions are activated. The activity should vary when a local or remote function is activated.
4. Check for activity on the Data line at pin 14. This line conveys the command or status information sent between the various devices on the bus while the rest of the signals are used for timing and directing the data transfer. The viewable activity on this line is very similar to the activity seen on the Clock line.
5. Check for activity on the Enable line at pin 13. Before commands can be sent to a specific bus device, the system control micro sends the address of the desired device to inform it that it is going to be receiving a command. A Lo on the enable line signifies that device information is being transmitted on the Data line while a Hi signifies command data. The viewable activity is about the same as seen on the Clock and Data lines.

Video IF

No Video, Audio OK–Since audio is taken from Q2302, you can assume that circuits prior to this stage are functioning properly. Check for video before and after the 4.5MHz trap, CF2301. If present, check for video at the emitter of Q2701. If present, the problem must lie beyond this circuit.

No Video or Audio–Check for video at the base of Q2302. If present, check for video at the collector and emitter of Q2302. If signal is not present, suspect defective Q2302.

If signal is not present at the base of Q2302, Check for 300 mV p-p signal at pin 3 of the tuner. If present, check for 140 mV p-p signal at pins 9 and 10 of U1001. If signal is not present suspect defective Q2301 or SF2301. If signal is present, check DC voltage at pin 1 of the tuner (AGC). It must be greater than 2.0 volts. If AGC voltage is greater than 2.0 volts suspect defective U1001.

Luminance Processing

No Video–Check for -Y signal at emitter of Q2906. If signal is not present, check for composite video input at pin 1 of the analog comb filter IC, U2601. If present, trace composite video signal from pins 2 and 3 of U2601 through 1H delay line to pin 5 of U2601. If present check for Y and C signal output from U2601 at pins 7 and 8 respectively. If present, check for luminance at pins 43 and 40 of U1001. Make sure the Sync Kill line is not active except during channel change. If present, trace the luminance signal from pin 38 of U1001 to pin 35 of U1001. Check brightness and contrast control lines (DC level should be variable). Make sure that pin 19 of U1001 is not stuck Lo (Blnk).

Chroma

No Color–Since most problems in the chroma stages result in the loss of Chroma, DC voltage and signal variation is the best way to troubleshoot this stage.

Check for R-Y, G-Y and B-Y outputs at pins 15, 17 and 18 of U1001. If not present, check for chroma input as well as DC offset at pin 31 of U1001. If present, check for burst key pulse at pin 21, color killer voltage at pin 30 and leaky or open APC Filter, C2802, at pin 12. Also check the 3.58 MHz oscillator.

Digital Audio

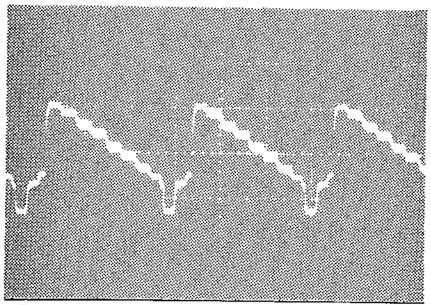
No Audio–Make sure volume level is not set at minimum. Connect a external audio source to one of the external audio input jacks at the rear of the instrument. If audio is present, check the wide band audio circuit coming from pin 52 of U1001.

If no audio is present from either internal or external source, check for audio at pins 20 and 21 of U1600. If present, the problem most likely is in the power amp stage. If audio is not present at pins 20 and 21, check for audio at pins 23 and 24 of U1600. If audio is present, the problem most likely is in the volume control section of U1600.

OSD Stereo never indicates Stereo on known Stereo Station–Select Mono mode in audio menu and connect a frequency counter to pin 15 of U1600 through a 10X low cap probe. Frequency should be 11,014,000 Hz ± 500 Hz. If not, suspect defective C1613 or C1614. Also check for 2.5 volts DC bias at pin 14 of U1600.

Poor Stereo Separation–Check wide band audio input level adjustment.

WAVEFORMS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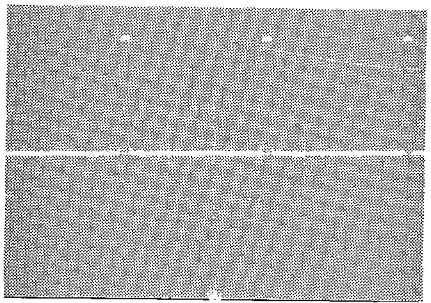
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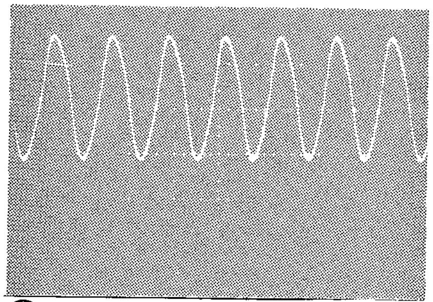
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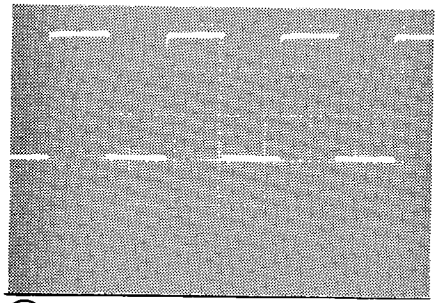
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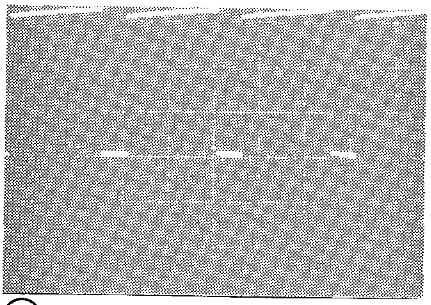
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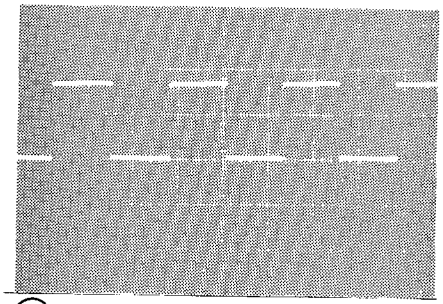
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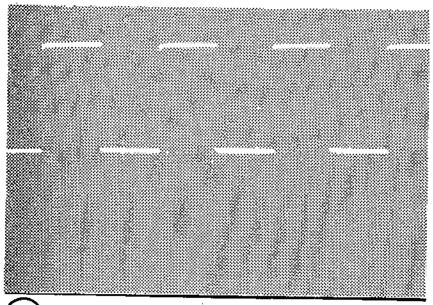
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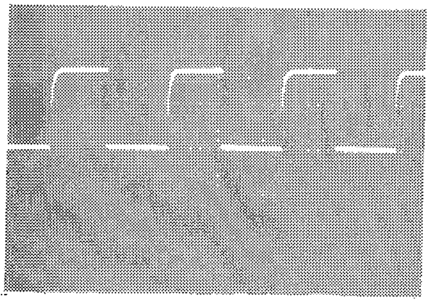
4.8Vp-p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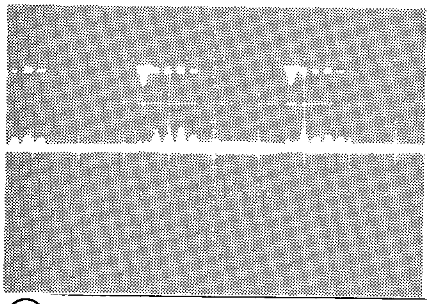
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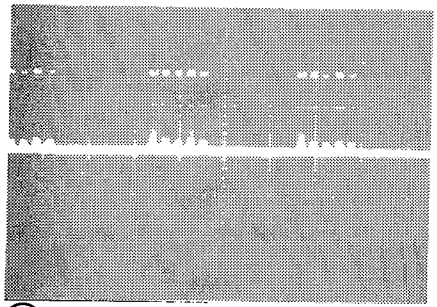
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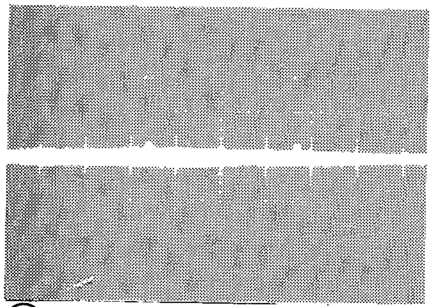
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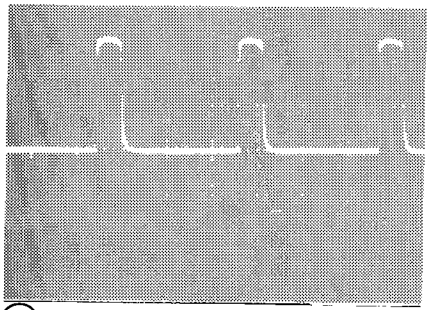
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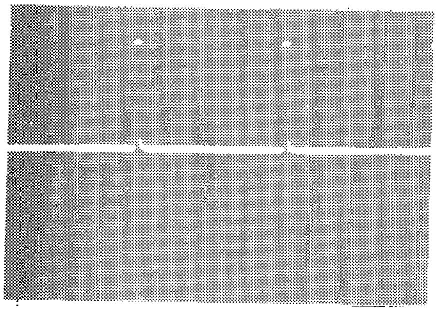
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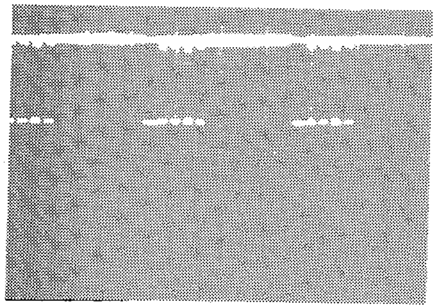
4.8Vp-p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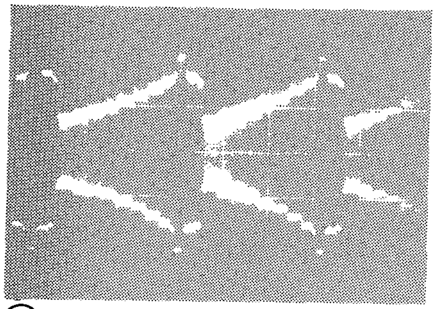
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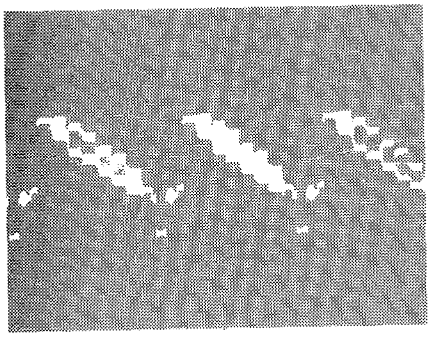
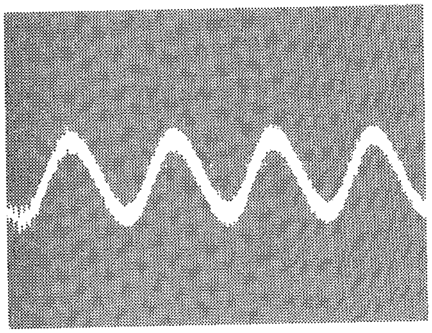
0.9Vp-p AC coupled

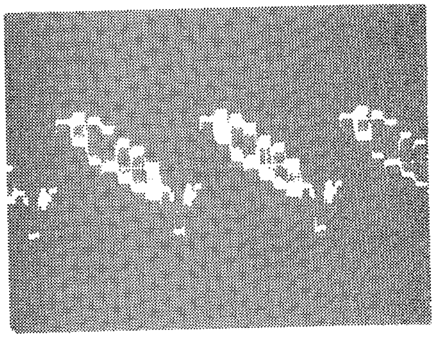
WAVEFORMS (Continued)



⑯ *0.5V/20μsec/div.*
1.3Vp-p AC coupled



⑰ *0.05V/0.1μsec/div.*
0.1Vp-p AC coupled



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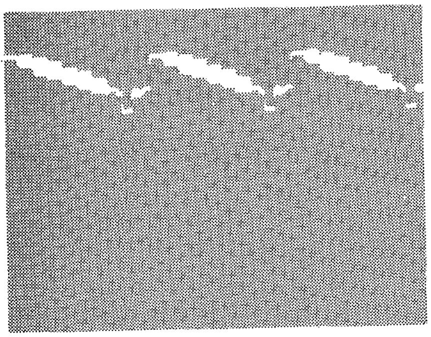
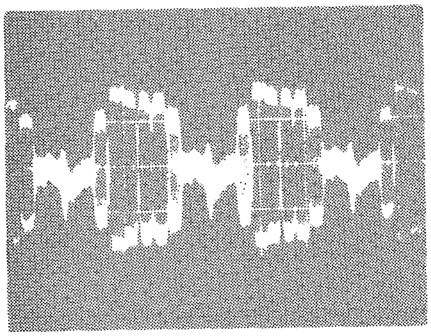
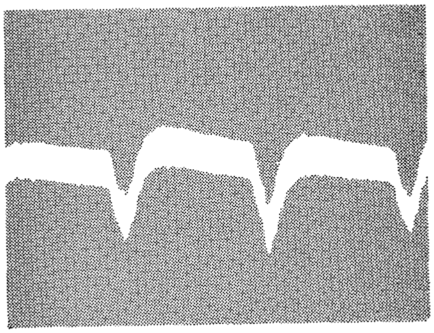
1.4Vp-p AC coupled



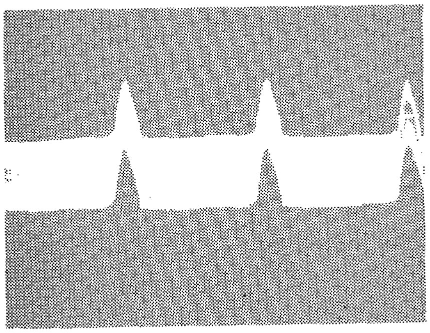
⑲ *1V/20μsec/div.*
1.3Vp-p



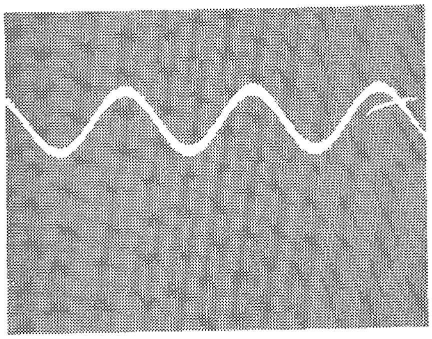
⑳ *0.05V/20μsec/div.*
0.2Vp-p AC coupled



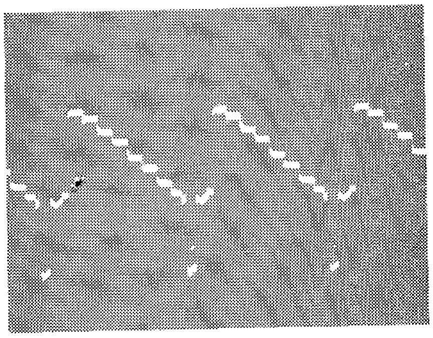
㉑ *0.02V/20μsec/div.*
0.06Vp-p AC coupled



(22a) *0.2V/20μsec/div.*
0.6Vp-p



(22b) *0.2V/0.1μsec/div.*
0.3Vp-p



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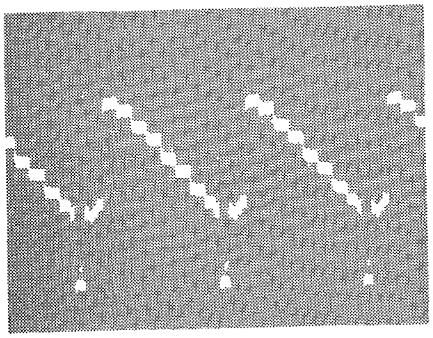
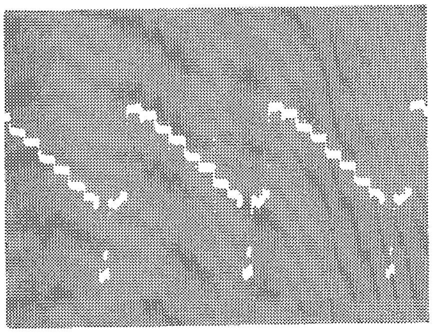
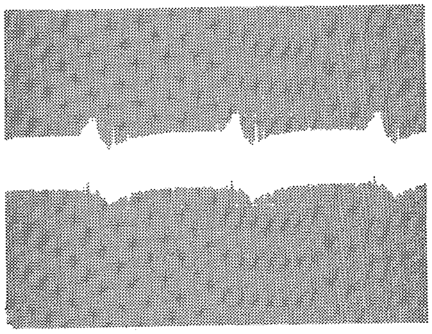
1.9Vp-p AC coupled



㉔ *0.2V/20μsec/div.*
0.83Vp-p AC coupled

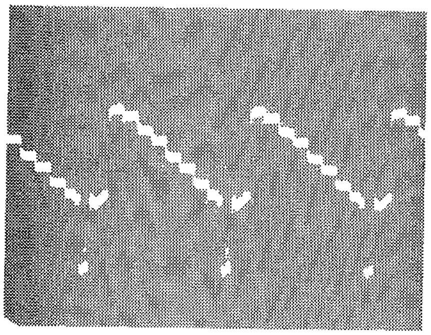


㉕ *0.5V/20μsec/div.*
2.0Vp-p AC coupled



㉖ *0.05V/20μsec/div.*
0.1Vp-p AC coupled

WAVEFORMS (Continued)



(27) 0.2V/20µsec/div.
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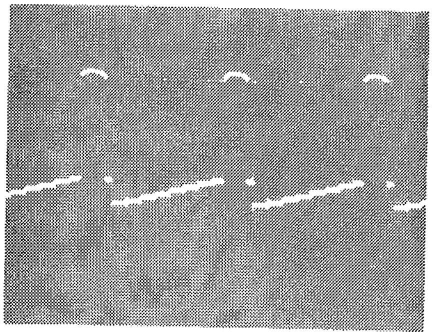
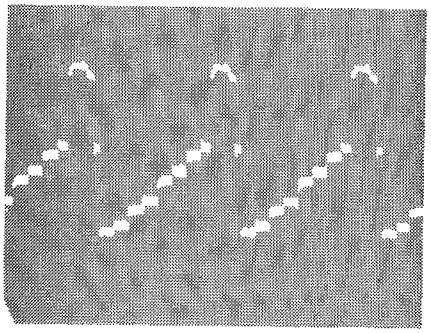
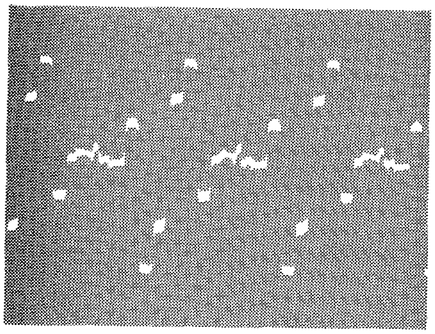


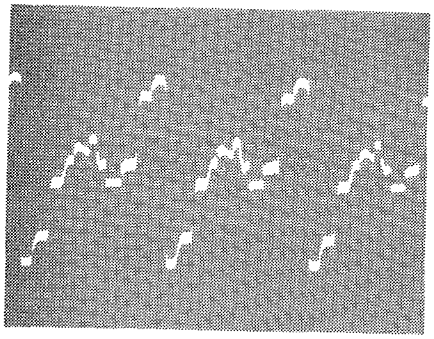
(28) 2V/20µsec/div.
6.0Vp-p AC coupled



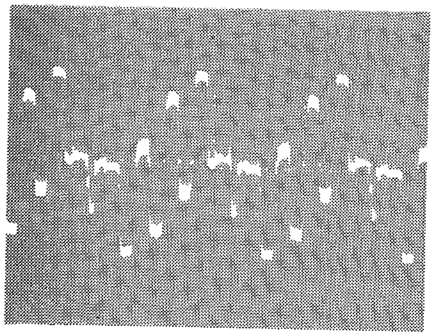
(29) 0.5V/20µsec/div.
2.0Vp-p AC coupled



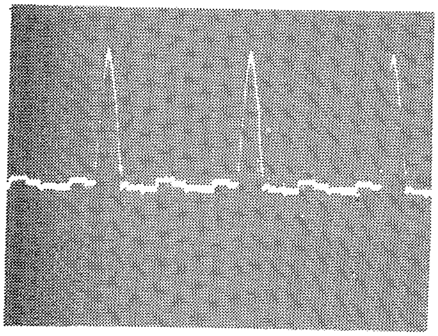
(30) 0.5V/20µsec/div.
2.4Vp-p AC coupled



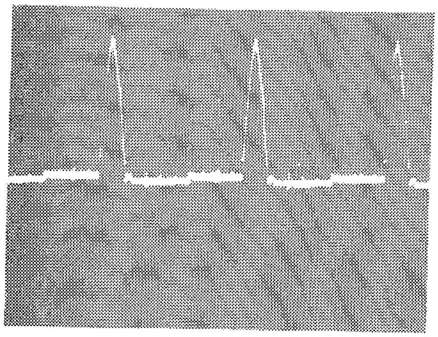
(31) 0.2V/20µsec/div.
0.85Vp-p AC coupled



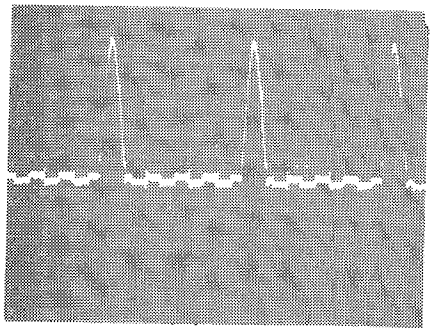
(32) 0.5V/20µsec/div.
2.1Vp-p AC coupled



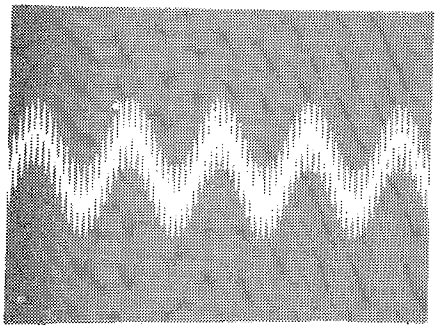
(33) 2V/20µsec/div.
6.0Vp-p AC coupled



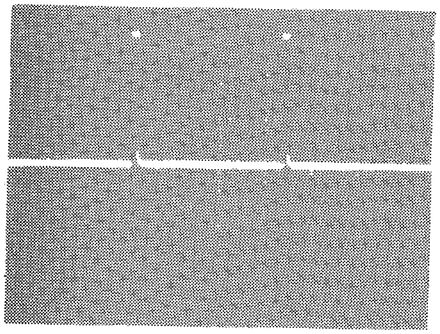
(34) 2V/20µsec/div.
6.0Vp-p AC coupled



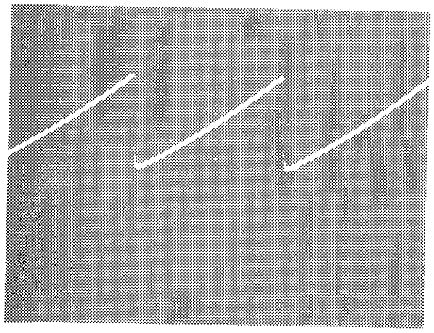
(35) 2V/20µsec/div.
6.1Vp-p AC coupled



(36) 0.2V/0.5msec/div.
0.8Vp-p L+R W/Pilot

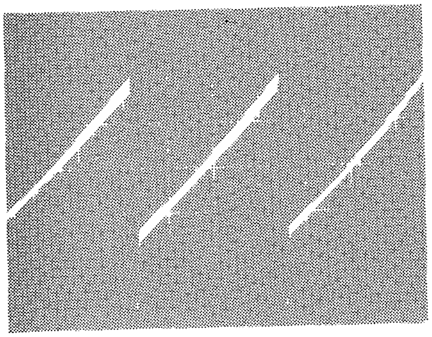


(37) 2V/5msec/div.
5.9Vp-p

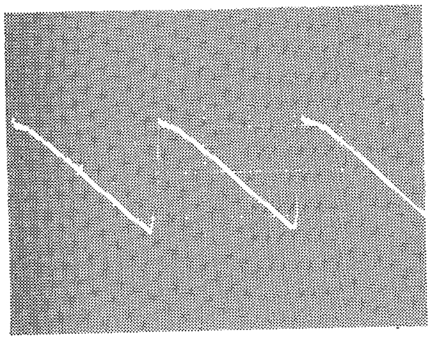


(38) 2V/5msec/div.
4.2Vp-p

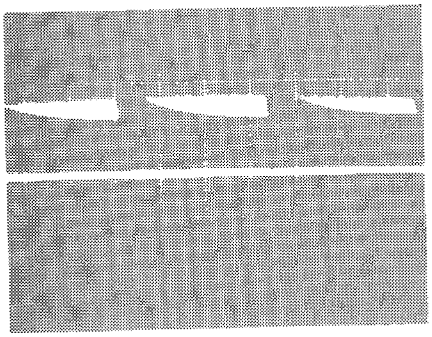
WAVEFORMS (Continued)



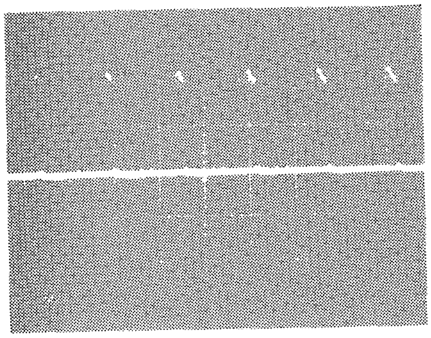
㊴ *0.2V/5msec/div.*
1.0Vp-p AC coupled



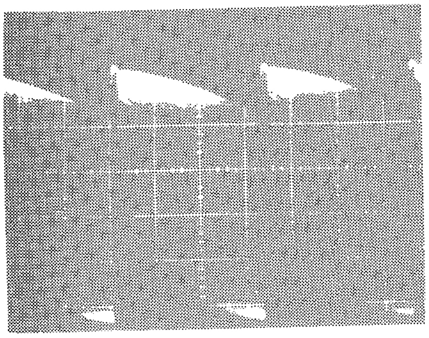
㊵ *0.5V/20µsec/div.*
1.3Vp-p AC coupled



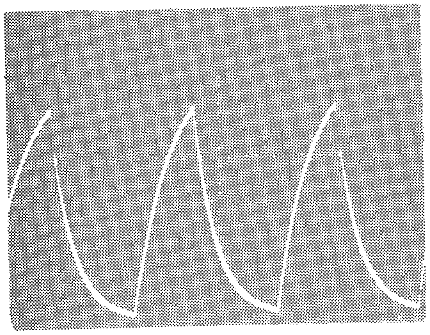
(41a) *10V/5msec/div.*
22Vp-p



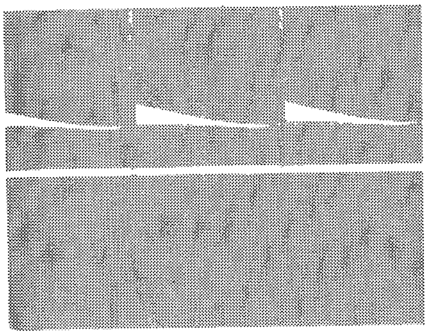
(41b) *10V/20µsec/div.*
22Vp-p



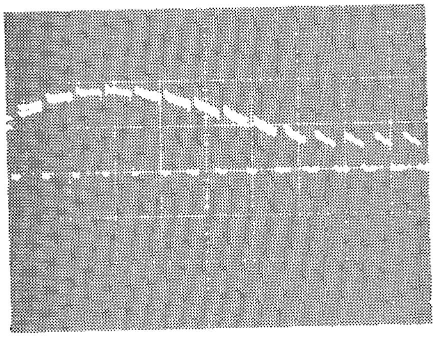
(42a) *2V/5msec/div.*
11.5Vp-p AC coupled



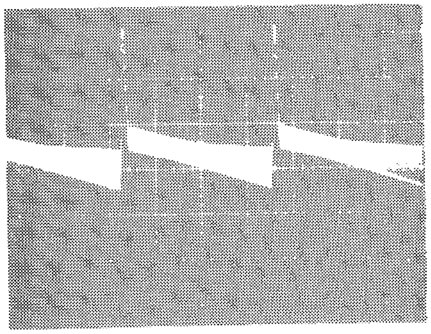
(42b) *2V/20µsec/div.*
9.0Vp-p AC coupled



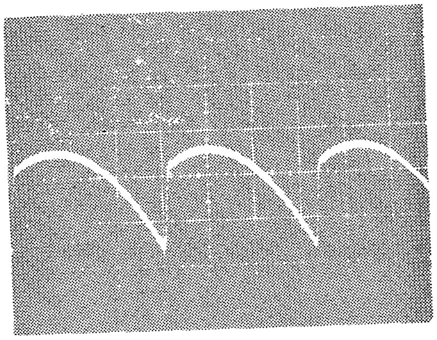
(43a) *50V/5msec/div.*
190Vp-p



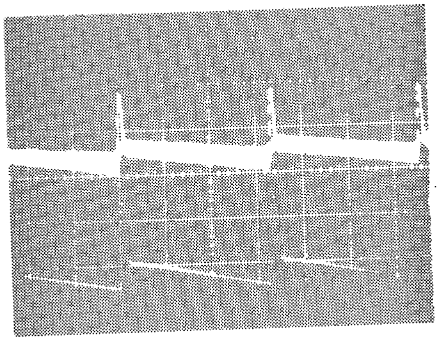
(43b) *100V/0.1msec/div.*
190Vp-p



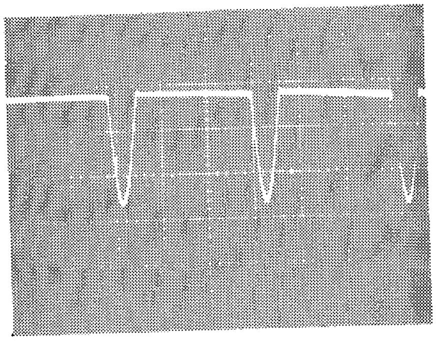
㊹ *50V/5msec/div.*
180Vp-p



㊺ *1V/5msec/div.*
2.2Vp-p AC coupled

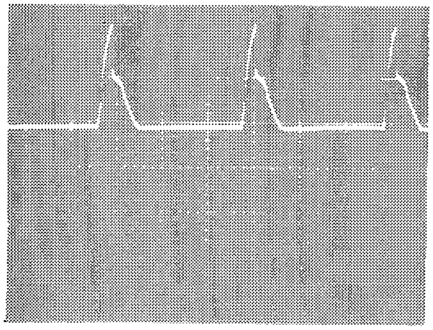


(46a) *100V/5msec/div.*
440Vp-p

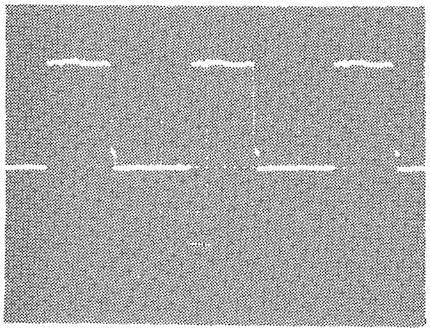


(46b) *100V/20µsec/div.*
250Vp-p

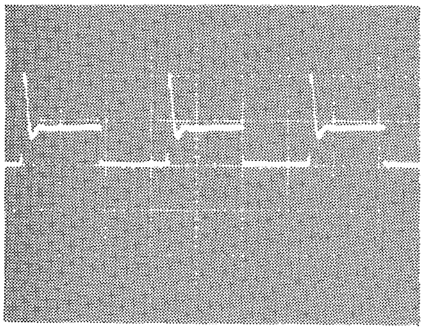
WAVEFORMS (Continued)



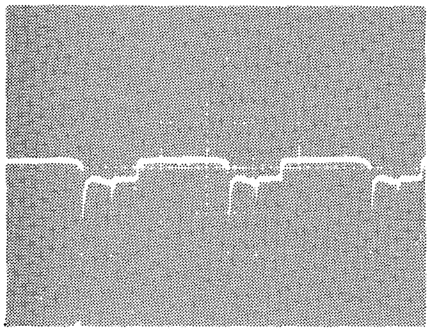
㊼ *1V/20μsec/div.*
2.3Vp-p



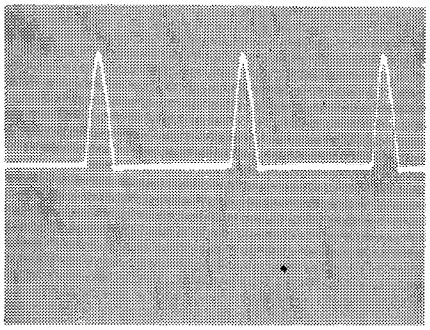
㊽ *2V/20μsec/div.*
4.8Vp-p



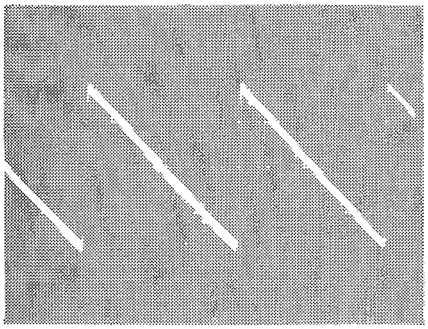
㊾ *20V/20μsec/div.*
40Vp-p



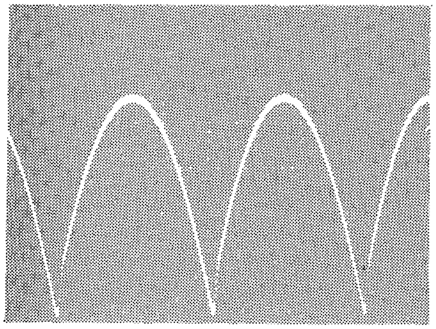
㊿ *5V/20μsec/div.*
1.1Vp-p



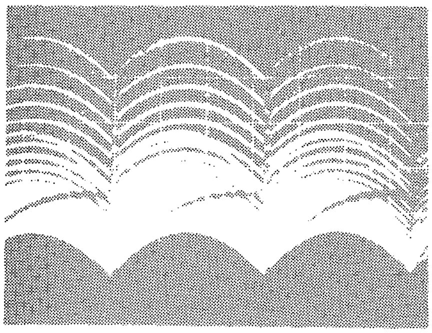
(51) *500V/20μsec/div.*
1300Vp-p



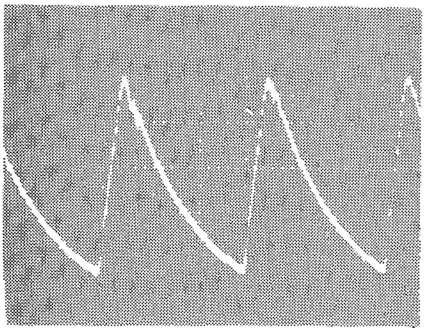
(52) *0.5V/5msec/div.*
1.8Vp-p AC coupled



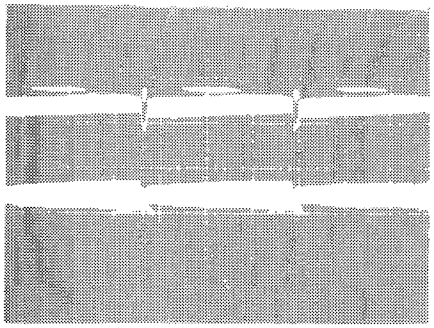
(53) *0.5V/5msec/div.*
2.4Vp-p AC coupled



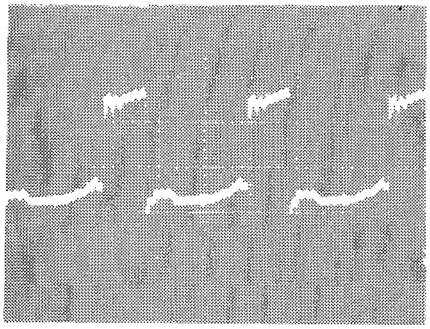
(54a) *0.2V/5msec/div.*
1.1Vp-p AC coupled



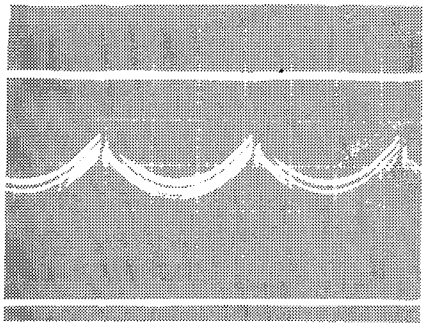
(54b) *0.2V/20μsec/div.*
0.85Vp-p AC coupled



(55a) *0.2V/5msec/div.*
0.6Vp-p AC coupled

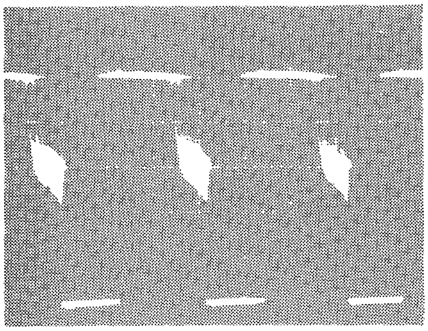


(55b) *0.2V/20μsec/div.*
0.6Vp-p AC coupled

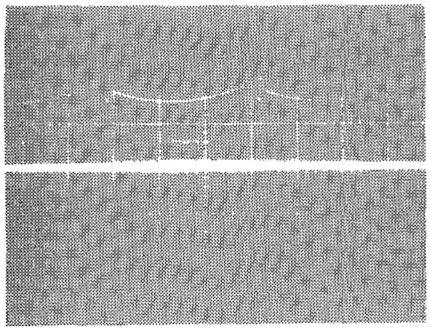


(56a) *5V/5msec/div.*
25Vp-p AC coupled

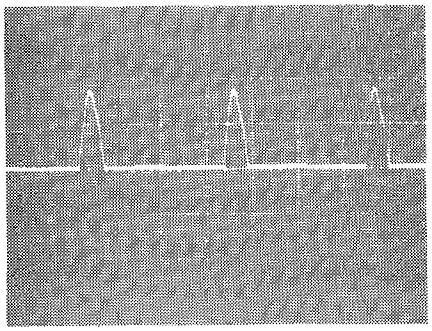
WAVEFORMS (Continued)



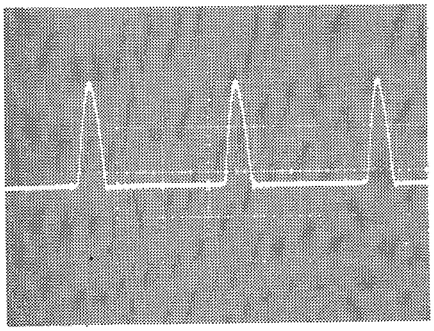
(56b) *5V/20μsec/div.*
25Vp-p AC coupled



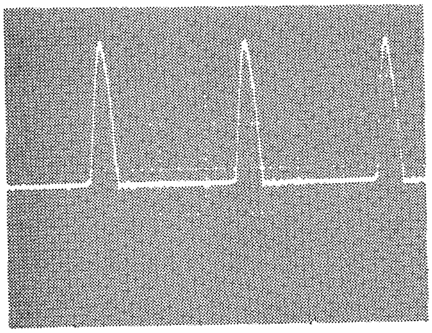
(57a) *100V/5msec/div.*
195Vp-p



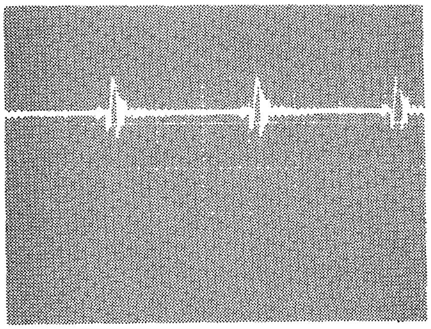
(57b) *100V/20μsec/div.*
180Vp-p



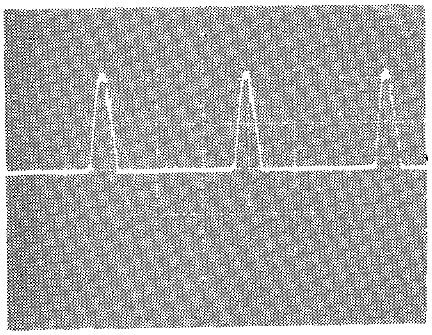
(58) *50V/20μsec/div.*
120Vp-p



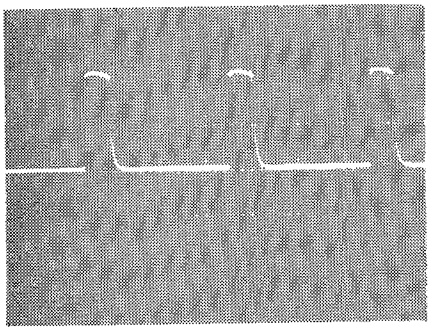
(59) *10V/20μsec/div.*
32Vp-p



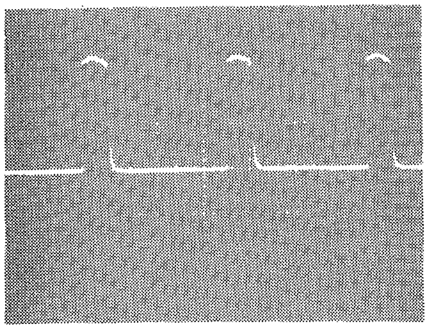
(60) *20V/20μsec/div.*
43Vp-p



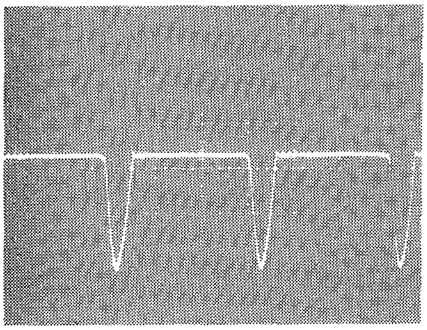
(61) *100V/20μsec/div.*
220Vp-p



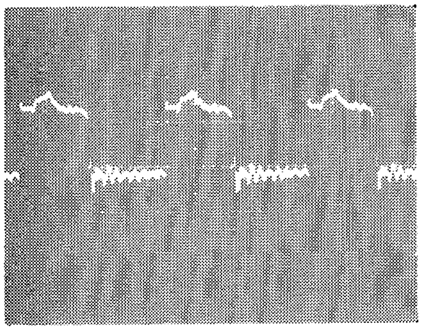
(62) *5V/20μsec/div.*
11Vp-p



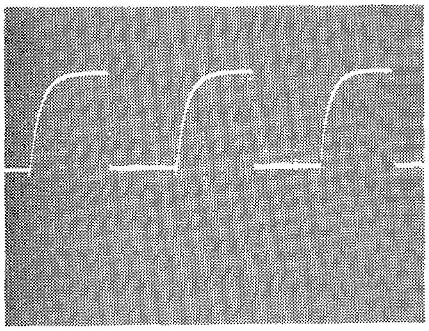
(63) *2V/20μsec/div.*
5.0Vp-p



(64) *50V/20μsec/div.*
125Vp-p

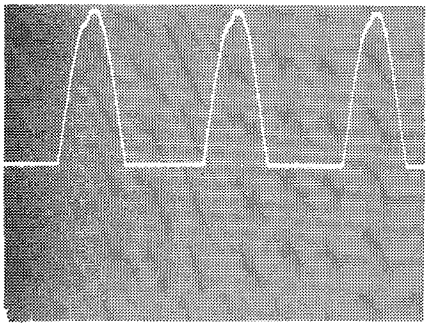


(65) *0.5V/20μsec/div.*
1.0Vp-p

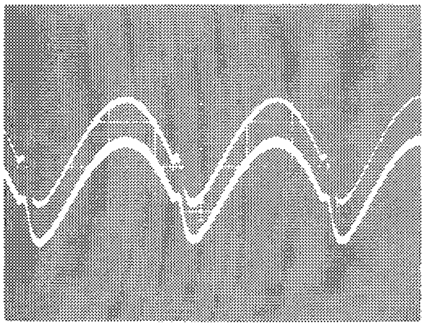


(66) *5V/20μsec/div.*
11Vp-p

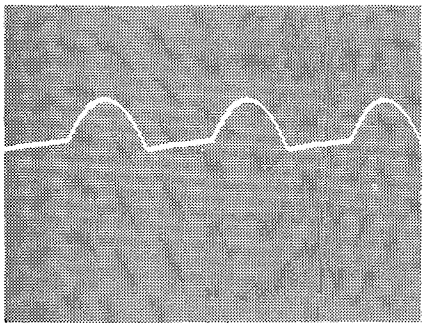
WAVEFORMS (Continued)



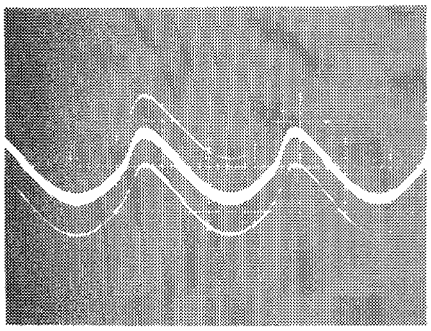
(67) *100V/20µsec/div.*
340Vp-p



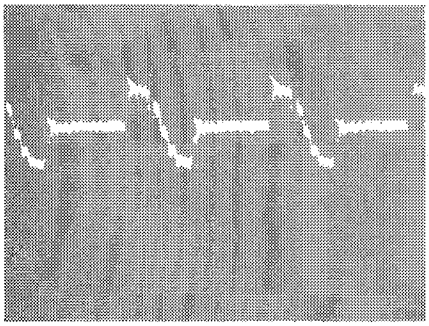
(68a) *5V/5msec/div.*
17Vp-p AC coupled



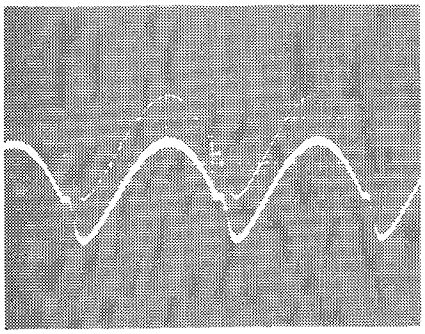
(68b) *5V/20µsec/div.*
5.5Vp-p AC coupled



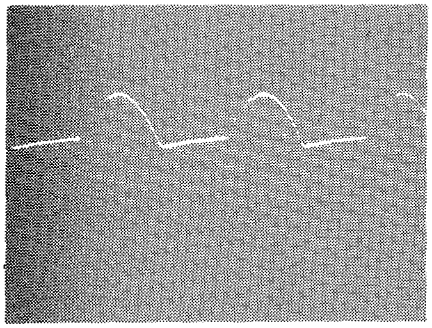
(69a) *0.2V/5msec/div.*
0.65Vp-p AC coupled



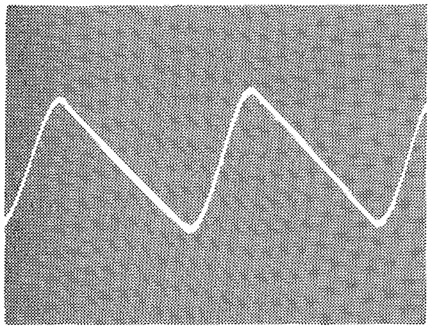
(69b) *0.2V/20µsec/div.*
0.4Vp-p AC coupled



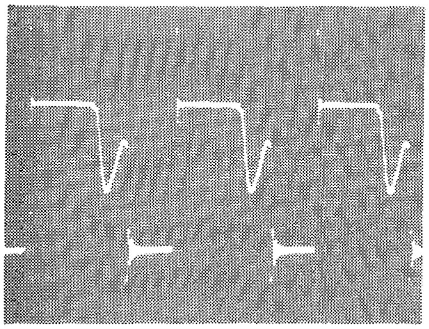
(70a) *5V/5msec/div.*
17Vp-p AC coupled



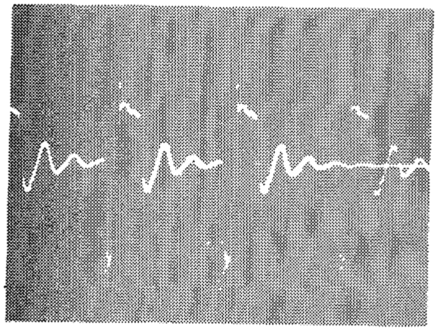
(70b) *5V/20µsec/div.*
7.0Vp-p AC coupled



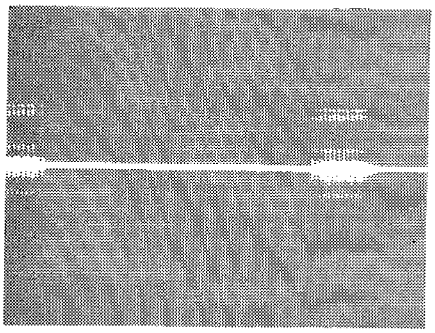
(71) *2V/2msec/div.*
6.0Vp-p AC coupled



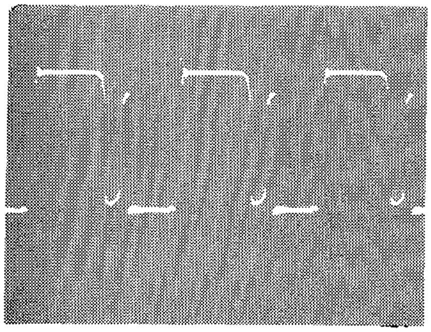
(72a) *10V/20µsec/div.*
57Vp-p



(72b) *10V/20µsec/div.*
46Vp-p TV Off

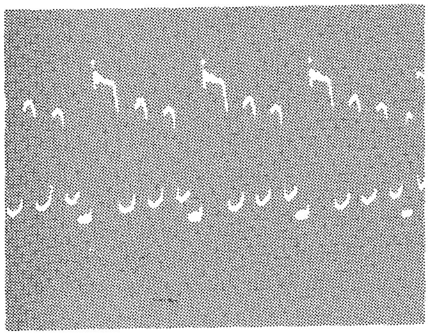


(72c) *10V/0.5msec/div.*
46Vp-p TV Off

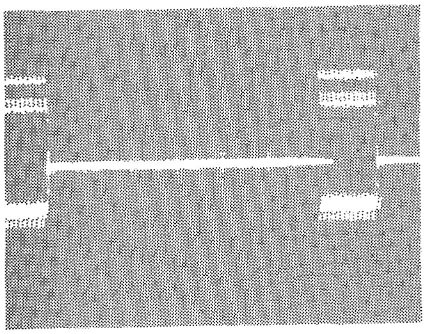


(73a) *0.5V/20µsec/div.*
2.2Vp-p

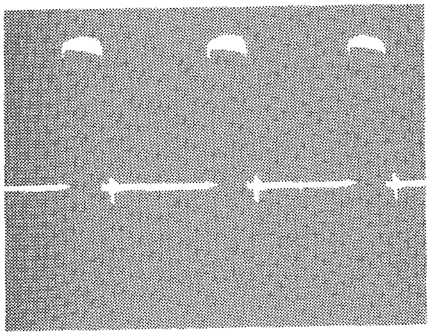
WAVEFORMS (Continued)



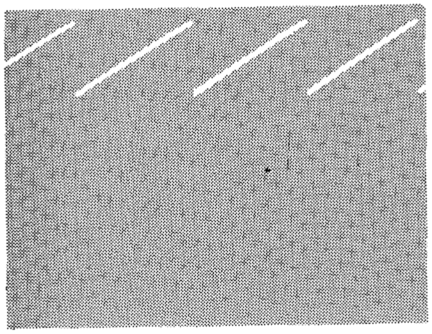
(73b) *0.5V/20μsec/div.*
1.8Vp-p TV Off



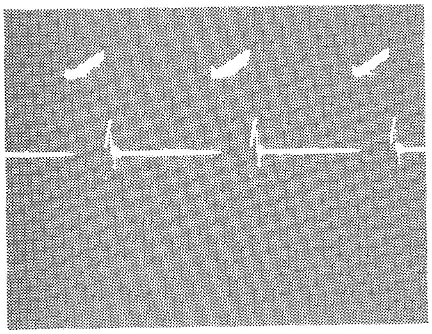
(73c) *0.5V/0.5msec/div.*
1.8Vp-p TV Off



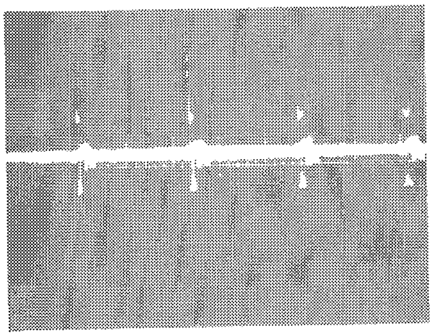
(74) *1V/20μsec/div.*
3.4Vp-p



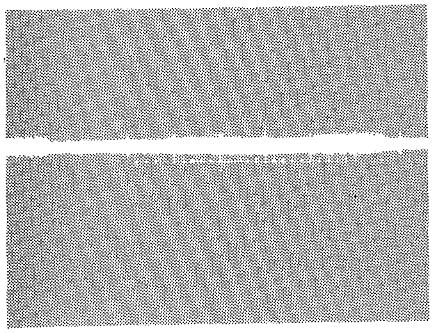
(75) *1V/20μsec/div.*
1.7Vp-p



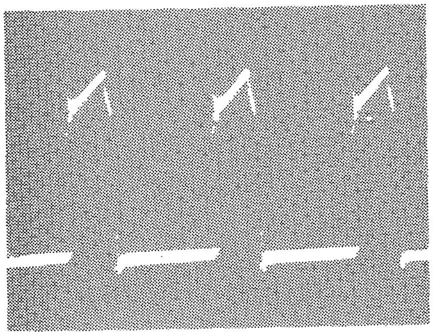
(76a) *2V/20μsec/div.*
6.5Vp-p



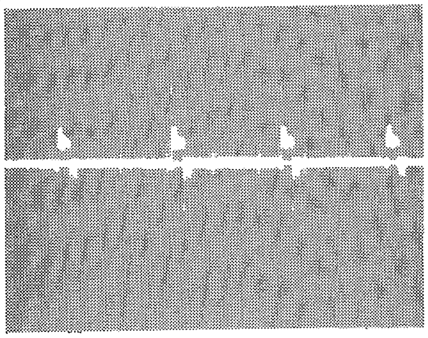
(76b) *2V/20μsec/div.*
6.5Vp-p TV Off



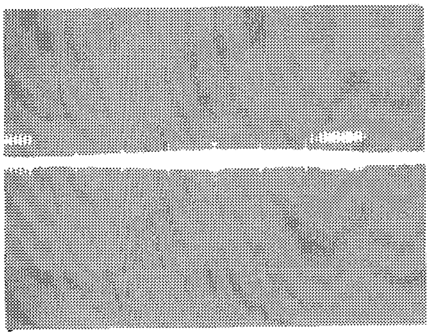
(76c) *2V/0.5msec/div.*
6.5Vp-p TV Off



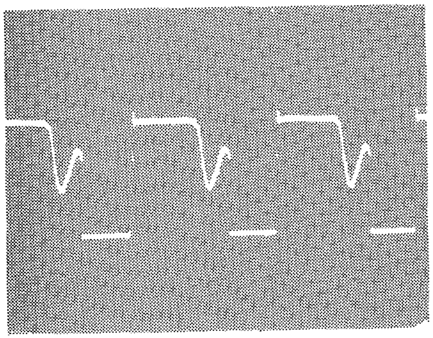
(77a) *1V/20μsec/div.*
5.4Vp-p



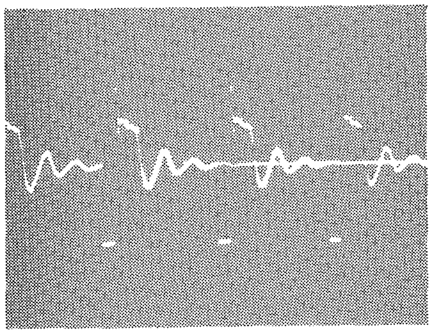
(77b) *2V/20μsec/div.*
10Vp-p TV Off



(77c) *2V/0.5msec/div.*
10Vp-p TV Off

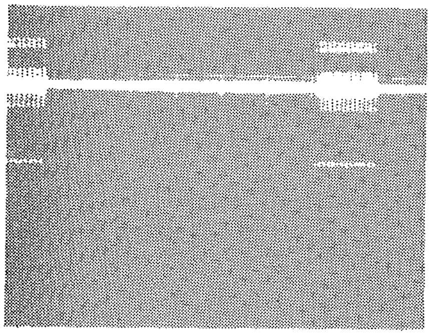


(78a) *100V/20μsec/div.*
500Vp-p

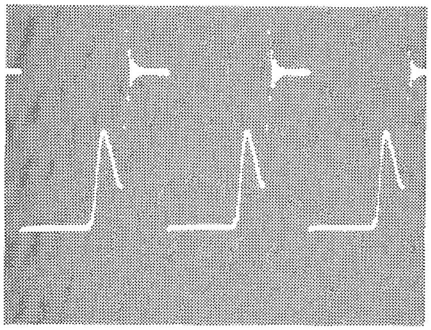


(78b) *100V/20μsec/div.*
340Vp-p TV Off

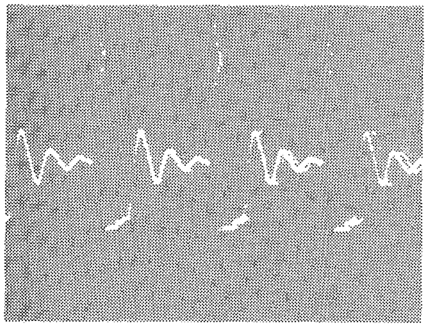
WAVEFORMS (Continued)



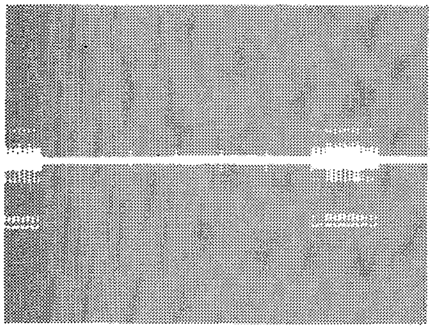
(78c) *100V/0.5msec/div.*
340Vp-p TV Off



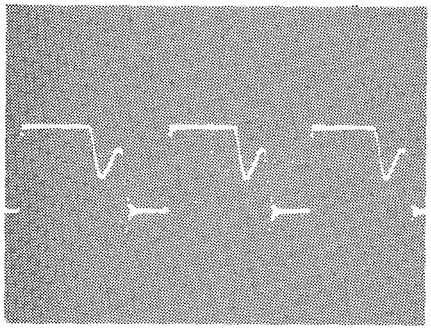
(79a) *100V/20µsec/div.*
550Vp-p AC coupled



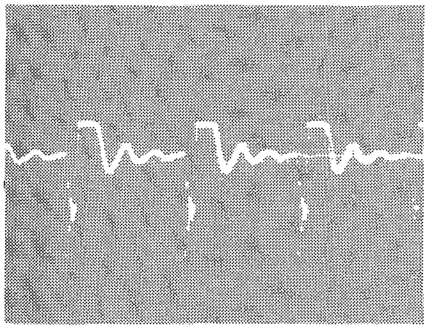
(79b) *100V/20µsec/div.*
550Vp-p AC coupled, TV Off



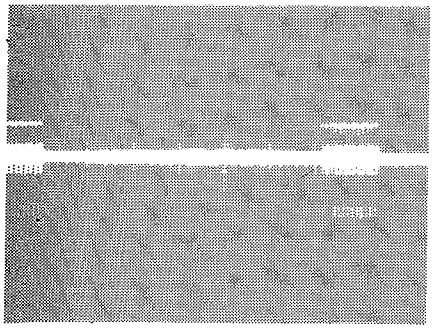
(79c) *100V/0.5msec/div.*
550Vp-p AC coupled, TV Off



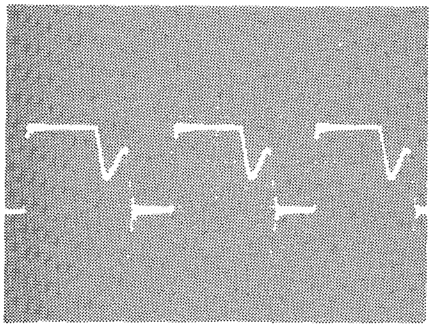
(80a) *20V/20µsec/div.*
60Vp-p



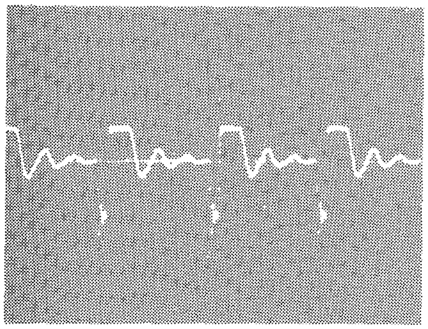
(80b) *20V/20µsec/div.*
60Vp-p TV Off



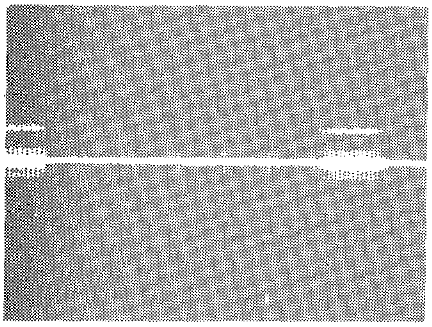
(80c) *20V/0.5msec/div.*
60Vp-p TV Off



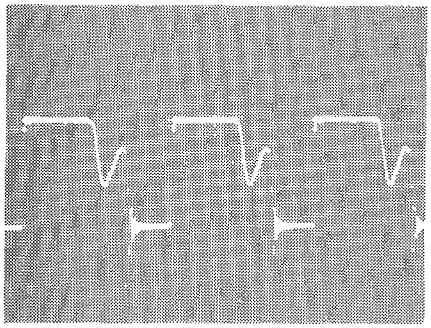
(81a) *10V/20µsec/div.*
30Vp-p



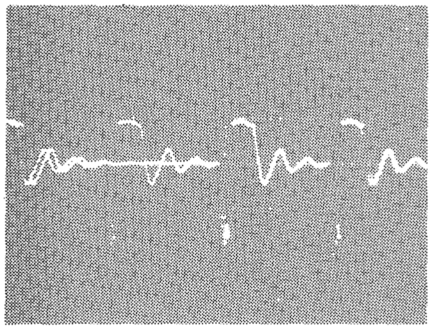
(81b) *10V/20µsec/div.*
30Vp-p TV Off



(81c) *10V/0.5msec/div.*
30Vp-p TV Off

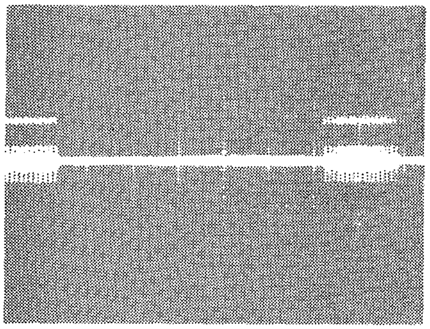


(82a) *20V/20µsec/div.*
75Vp-p

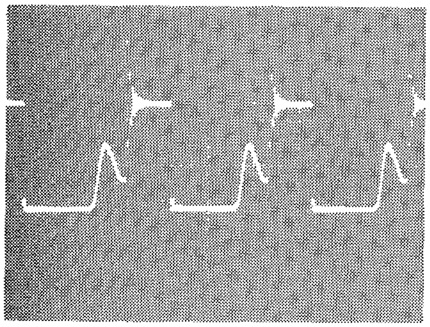


(82b) *20V/20µsec/div.*
75Vp-p TV Off

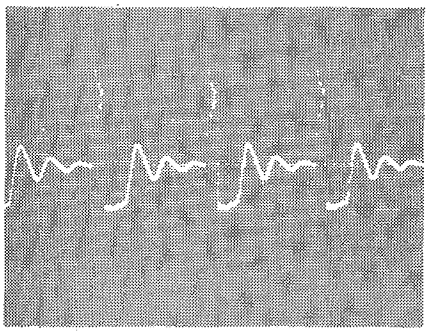
WAVEFORMS (Continued)



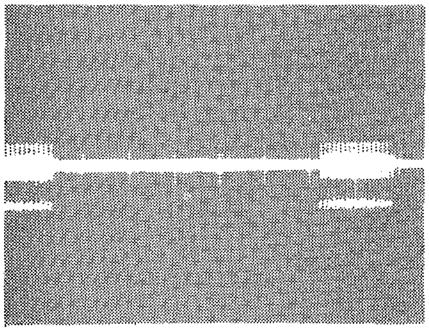
(82c) *20V/0.5msec/div.*
75Vp-p TV Off



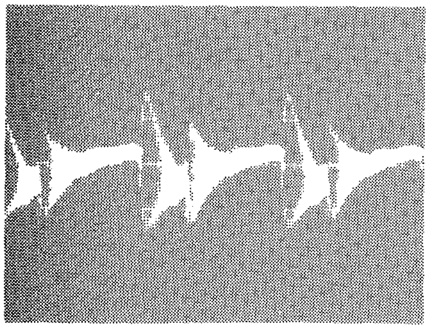
(83a) *20V/20µsec/div.*
75Vp-p



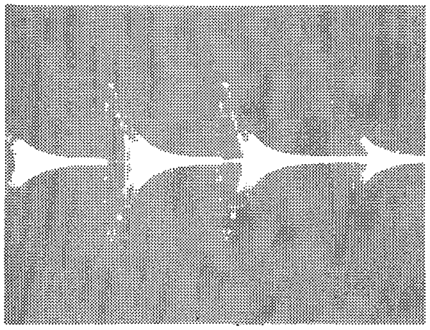
(83b) *20V/20µsec/div.*
75Vp-p TV Off



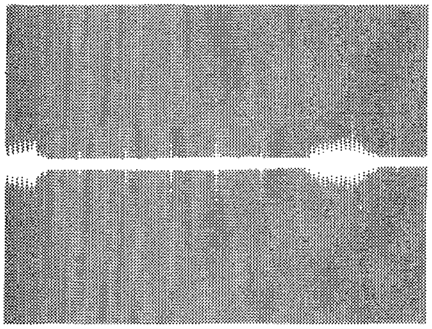
(83c) *20V/0.5msec/div.*
75Vp-p TV Off



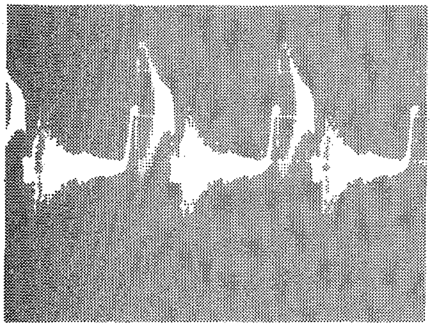
(84a) *0.5V/20µsec/div.*
2.0Vp-p AC coupled



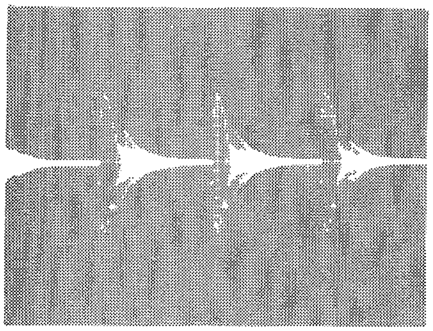
(84b) *0.5V/20µsec/div.*
1.8Vp-p TV Off



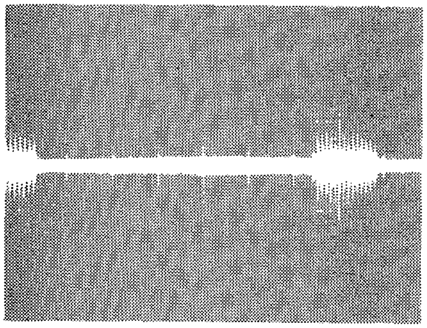
(84c) *0.5V/0.5msec/div.*
1.8Vp-p TV Off



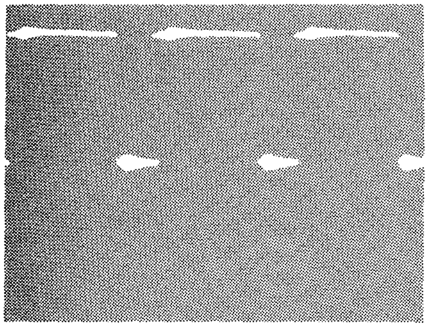
(85a) *0.5V/20µsec/div.*
2.2Vp-p



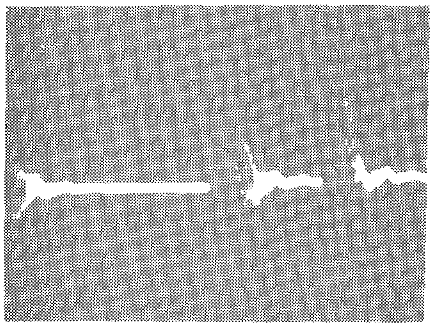
(85b) *0.5V/20µsec/div.*
1.5Vp-p TV Off



(85c) *0.5V/0.5msec/div.*
1.5Vp-p TV Off

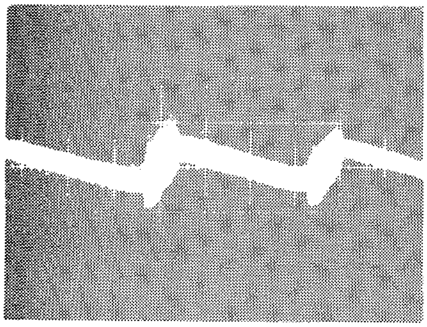


(86a) *5V/20µsec/div.*
15Vp-p

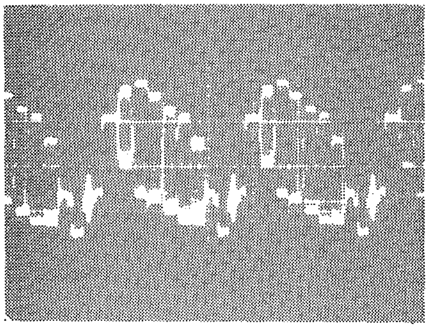


(86b) *0.2V/20µsec/div.*
1.3Vp-p AC coupled, TV Off

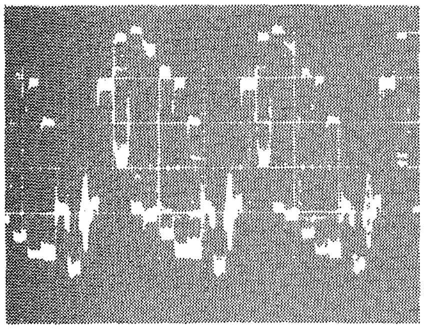
WAVEFORMS (Continued)



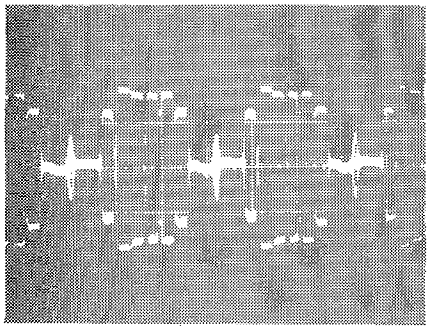
(86c) *0.2V/1msec/div.*
1.3Vp-p AC coupled, TV Off



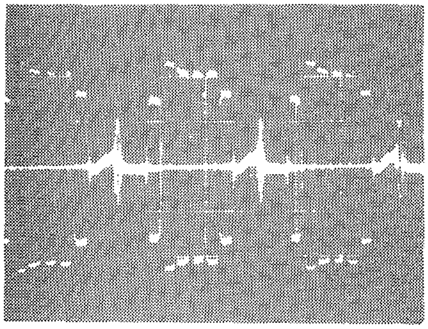
(87) *0.5V/20µsec/div.*
1.8Vp-p AC coupled



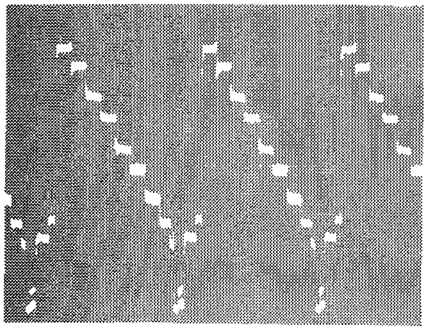
(88) *0.2V/20µsec/div.*
1.1Vp-p AC coupled



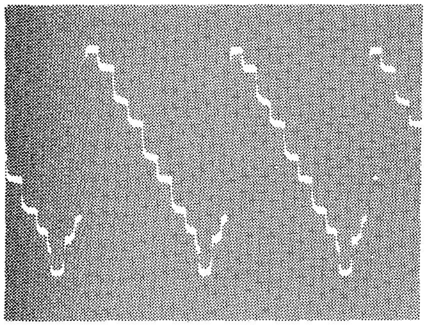
(89) *0.1V/20µsec/div.*
0.37Vp-p AC coupled



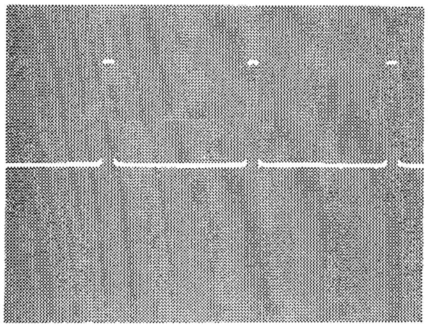
(90) *0.2V/20µsec/div.*
0.95Vp-p AC coupled



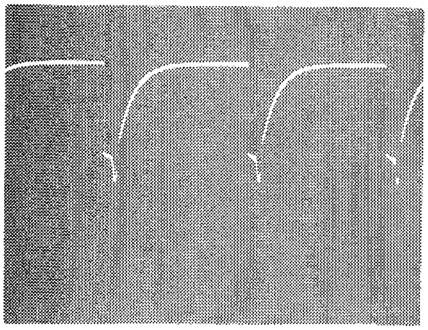
(91) *0.2V/20µsec/div.*
1.2Vp-p AC coupled



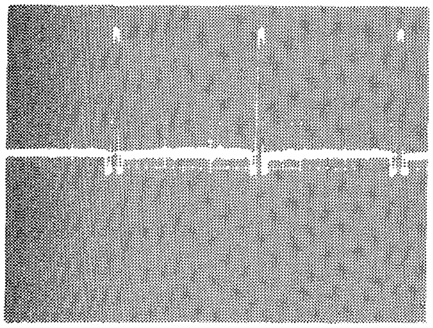
(92) *0.2V/20µsec/div.*
1.0Vp-p AC coupled



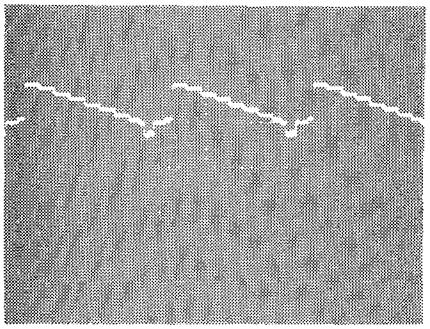
(93) *5V/20µsec/div.*
12Vp-p



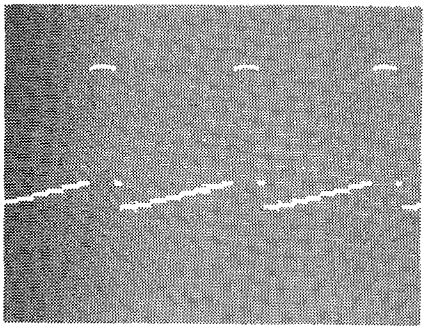
(94) *2V/20µsec/div.*
5.0Vp-p



(95) *0.5V/20µsec/div.*
1.6Vp-p

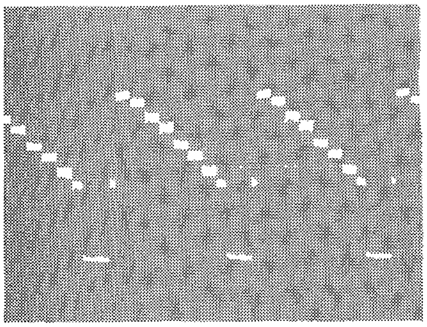


(96) *1V/20µsec/div.*
1.4Vp-p

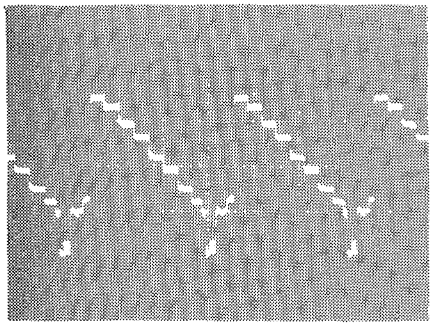


(97) *2V/20µsec/div.*
6.5Vp-p AC coupled

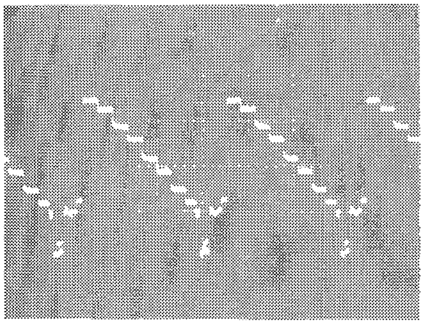
WAVEFORMS (Continued)



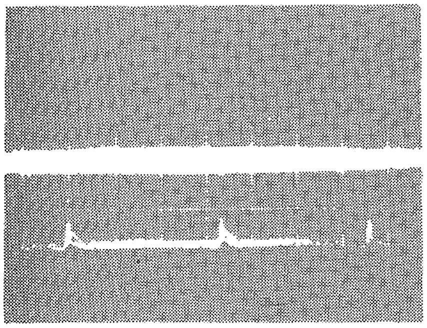
(98) *0.5V/20µsec/div.*
1.9Vp-p AC coupled



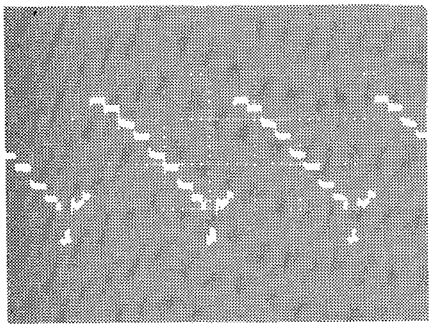
(99) *0.2V/20µsec/div.*
0.66Vp-p AC coupled



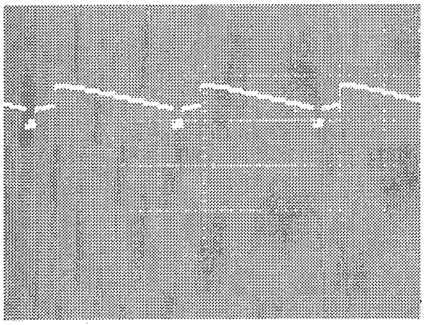
(100) *0.2V/20µsec/div.*
0.66Vp-p AC coupled



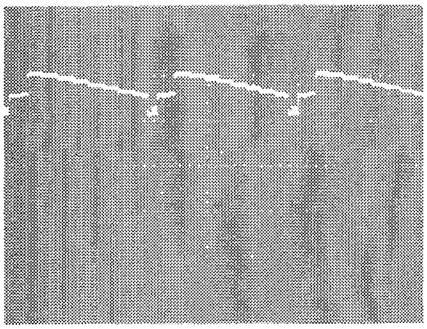
(101) *0.1V/5msec/div.*
0.2Vp-p AC coupled



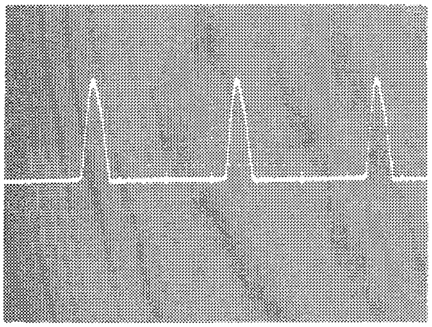
(102) *0.2V/20µsec/div.*
0.64Vp-p AC coupled



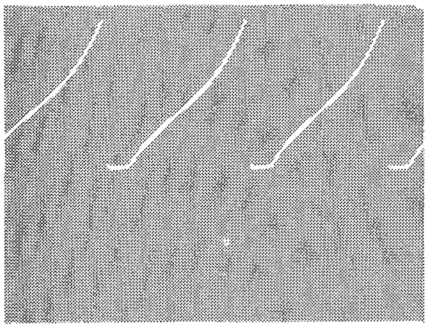
(103) *2V/20µsec/div.*
2.0Vp-p



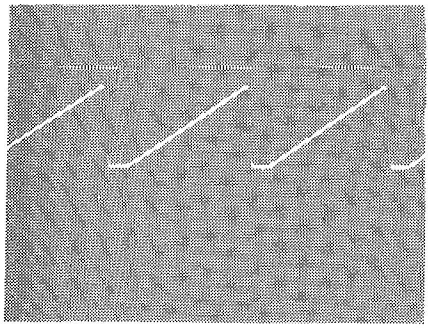
(104) *2V/20µsec/div.*
2.0Vp-p



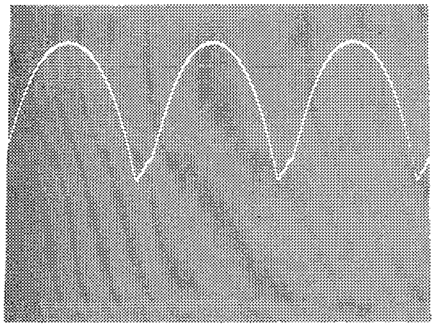
(105) *10V/20µsec/div.*
23Vp-p



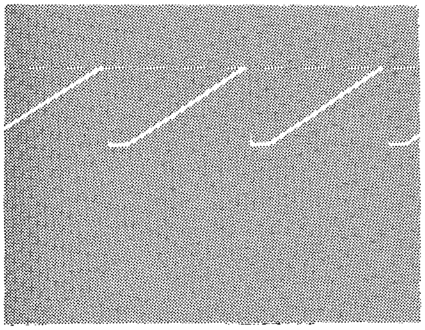
(106) *1V/20µsec/div.*
3.3Vp-p



(107) *2V/20µsec/div.*
3.8Vp-p

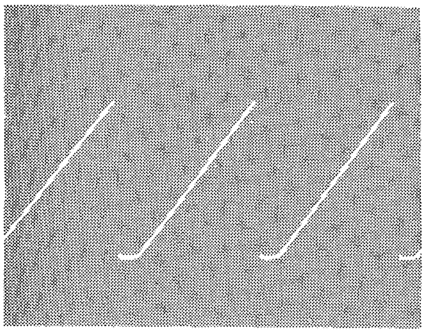


(108) *2V/20µsec/div.*
6.2Vp-p

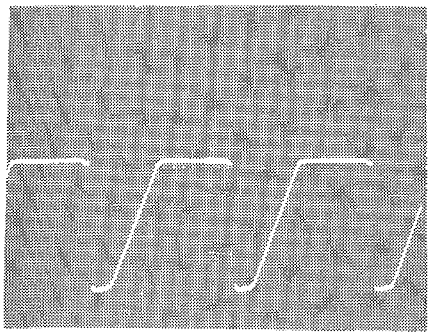


(109) *2V/20µsec/div.*
3.4Vp-p

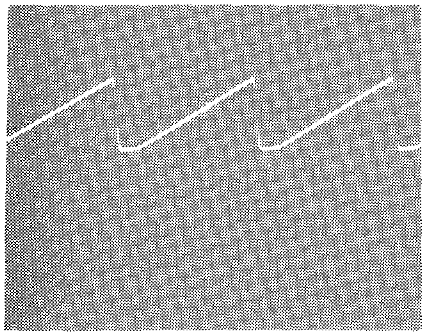
WAVEFORMS (Continued)



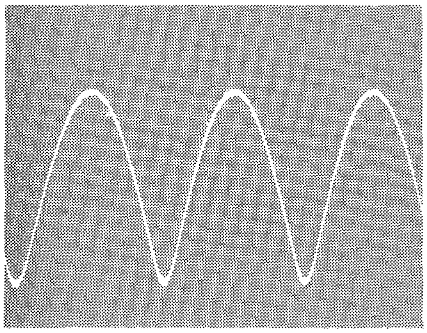
(110) *1V/20μsec/div.*
3.5Vp-p



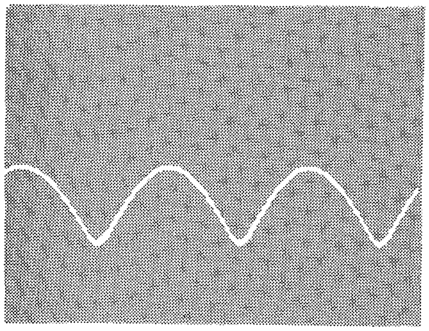
(111) *0.5V/20μsec/div.*
1.4Vp-p



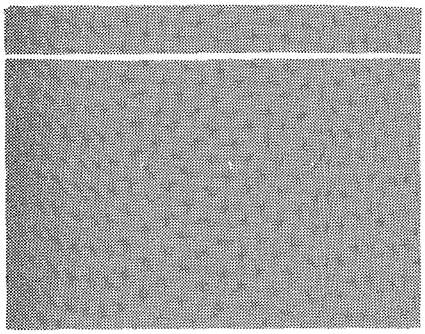
(112) *1V/20μsec/div.*
1.6Vp-p



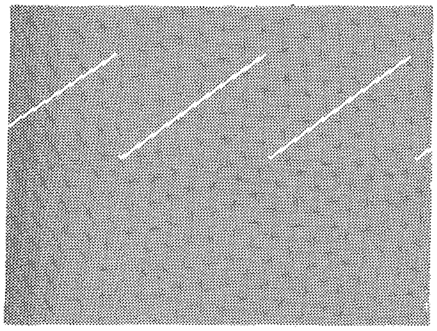
(113) *2V/20μsec/div.*
8.5Vp-p



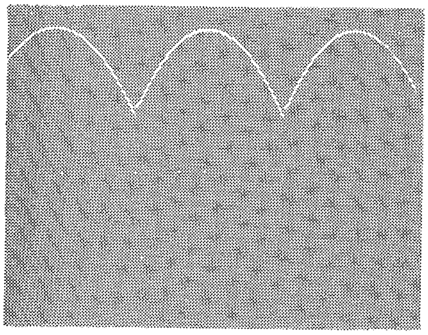
(114) *5V/20μsec/div.*
8.5Vp-p



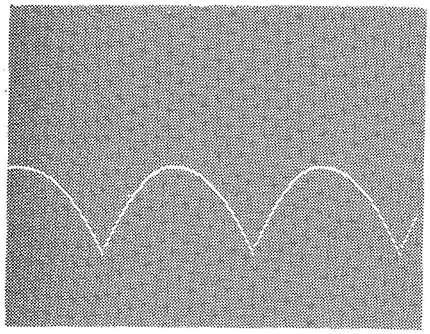
(115) *2V/10msec/div.*
5.0Vp-p



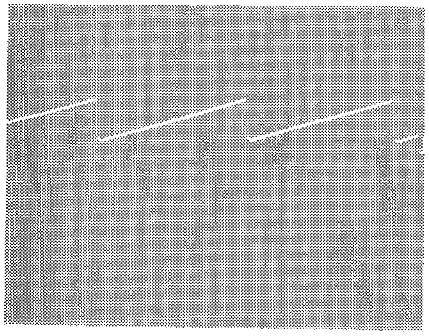
(116) *2V/5msec/div.*
4.9Vp-p



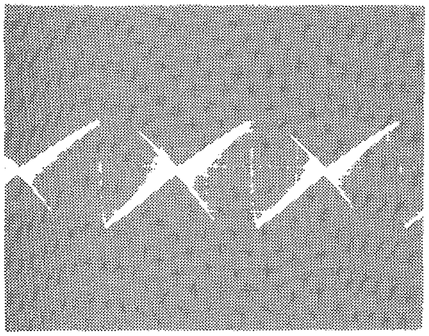
(117) *2V/5msec/div.*
3.9Vp-p



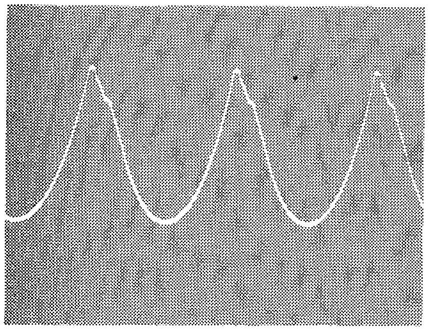
(118) *2V/5msec/div.*
4.0Vp-p



(119) *2V/5msec/div.*
4.6Vp-p

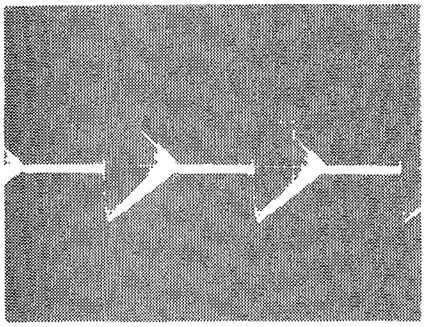


(120a) *0.5V/5msec/div.*
2.2Vp-p AC coupled

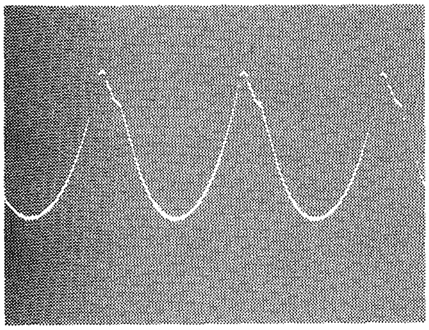


(120b) *0.5V/20μsec/div.*
1.7Vp-p AC coupled

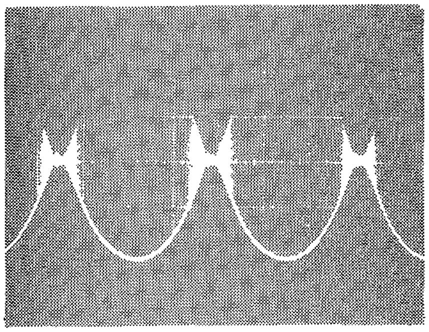
WAVEFORMS (Continued)



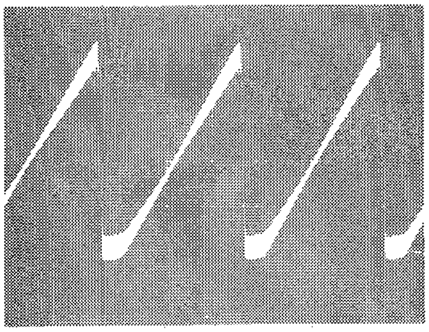
(121a) *0.5V/5msec/div.*
1.7Vp-p AC coupled



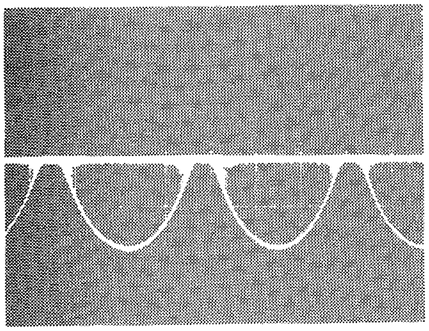
(121b) *0.5V/20μsec/div.*
1.7Vp-p AC coupled



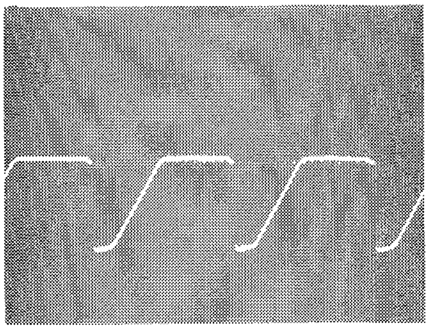
(122a) *0.5V/5msec/div.*
2.4Vp-p AC coupled



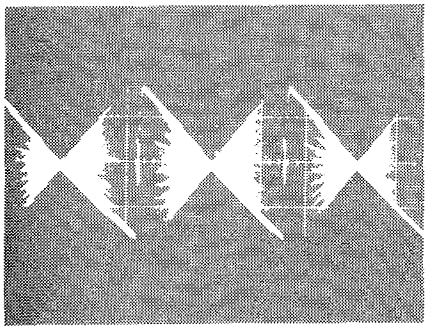
(122b) *0.5V/20μsec/div.*
2.4Vp-p AC coupled



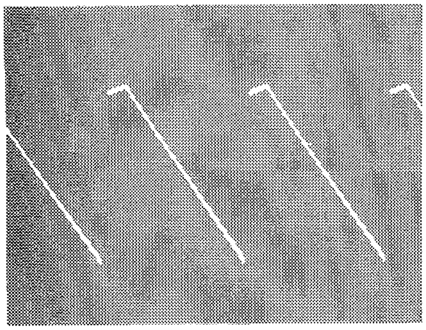
(123a) *0.5V/5msec/div.*
1.1Vp-p



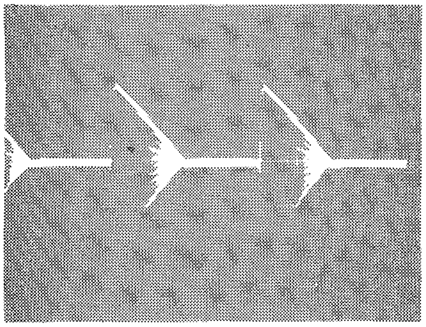
(123b) *0.5V/20μsec/div.*
1.1Vp-p



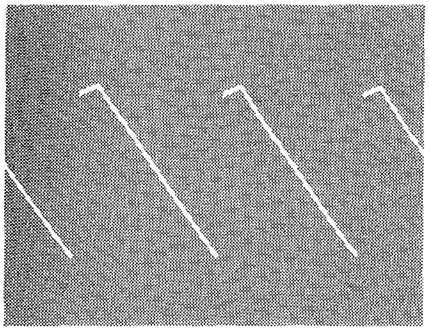
(124a) *0.5V/5msec/div.*
2.0Vp-p AC coupled



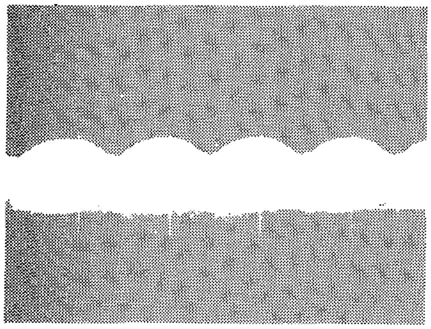
(124b) *0.5V/20μsec/div.*
2.0Vp-p AC coupled



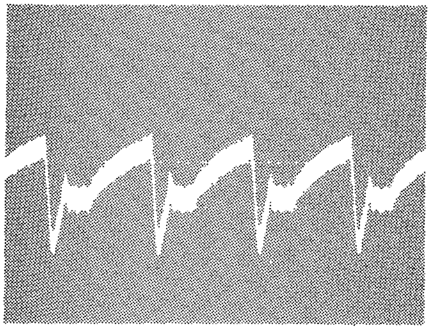
(125a) *0.5V/5msec/div.*
1.9Vp-p AC coupled



(125b) *0.5V/20μsec/div.*
1.9Vp-p AC coupled

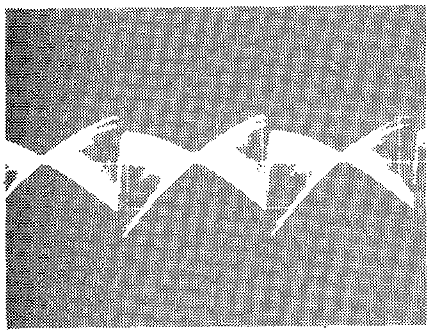


(126a) *0.05V/5msec/div.*
0.13Vp-p

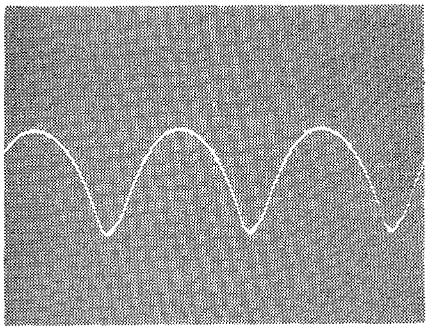


(126b) *0.05V/20μsec/div.*
0.13Vp-p

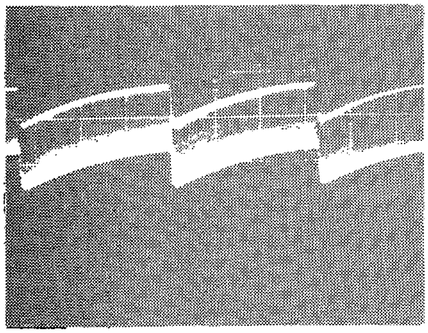
WAVEFORMS (Continued)



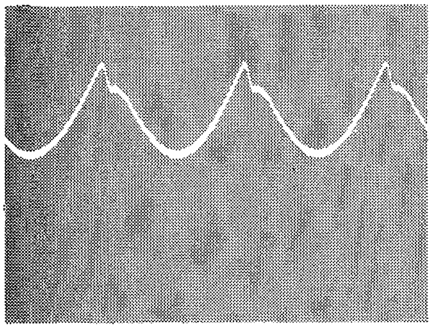
127a *0.5V/5msec/div.*
1.1Vp-p AC coupled



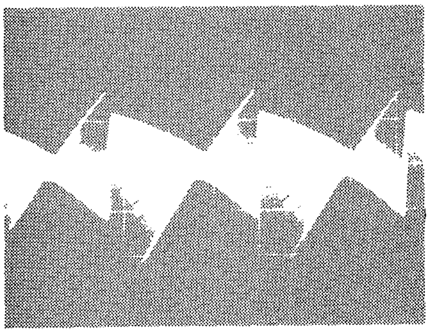
127b *0.5V/20μsec/div.*
1.1Vp-p AC coupled



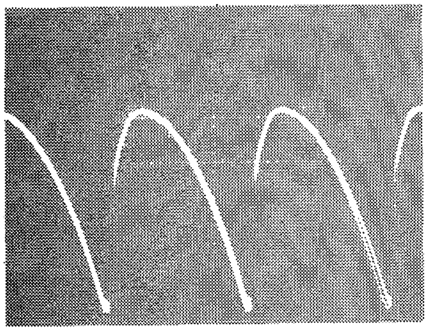
128a *0.5V/5msec/div.*
1.1Vp-p



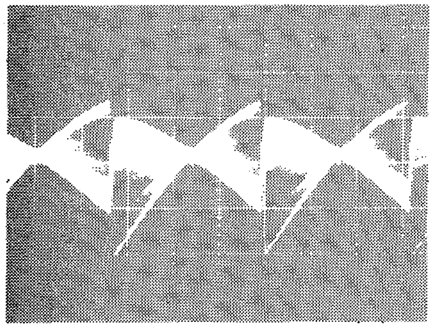
128b *0.5V/20μsec/div.*
1.1Vp-p



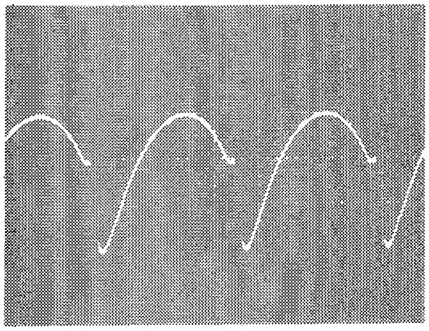
129a *0.5V/5msec/div.*
2.5Vp-p



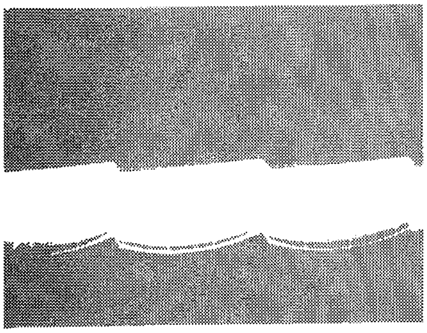
129b *0.5V/20μsec/div.*
2.3Vp-p



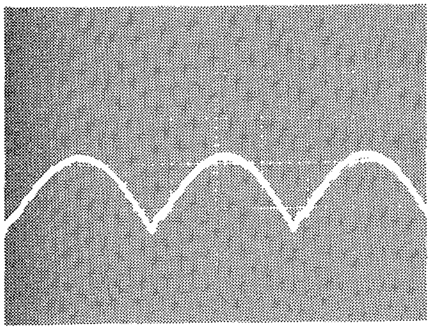
130a *0.5V/5msec/div.*
1.7Vp-p



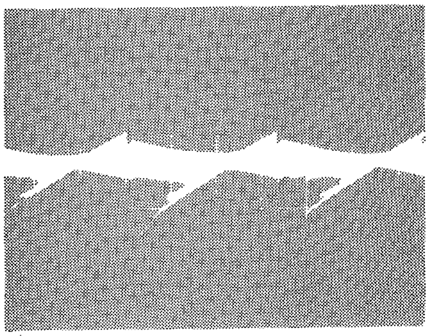
130b *0.5V/20μsec/div.*
1.5Vp-p



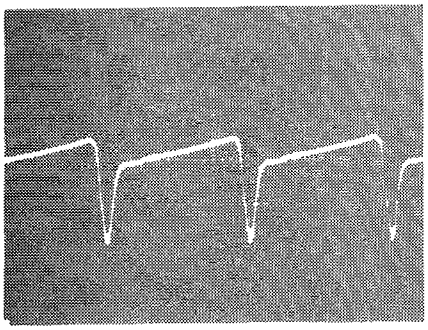
131a *0.5V/5msec/div.*
1.0Vp-p



131b *0.5V/20μsec/div.*
0.9Vp-p

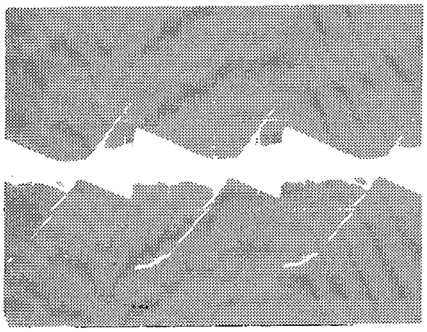


132a *5V/5msec/div.*
13Vp-p

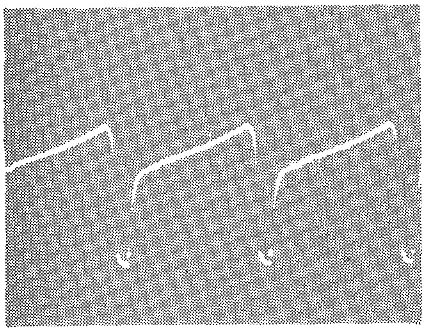


132b *5V/20μsec/div.*
11.5Vp-p

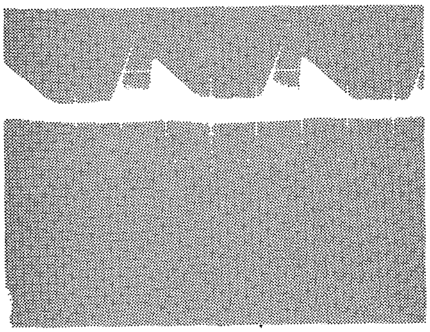
WAVEFORMS (Continued)



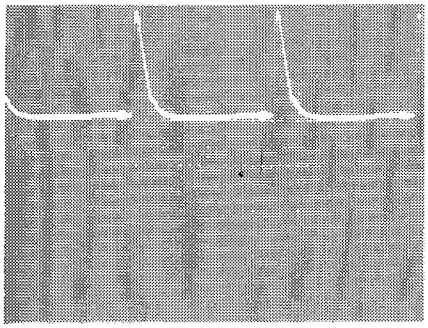
133a *20V/5msec/div.*
72Vp-p



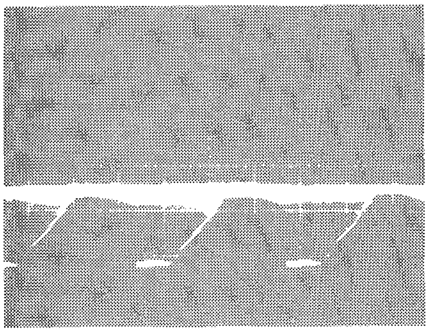
133b *20V/20µsec/div.*
60Vp-p



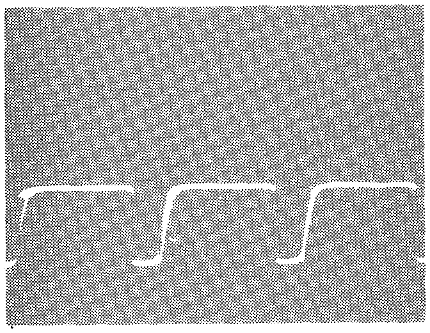
134a *10V/5msec/div.*
24Vp-p



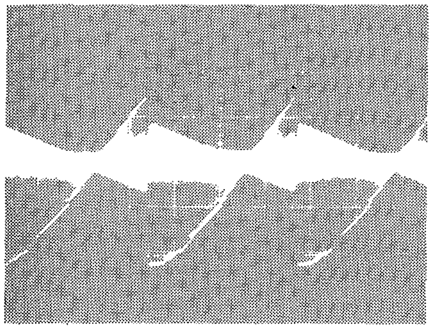
134b *10V/20µsec/div.*
24Vp-p



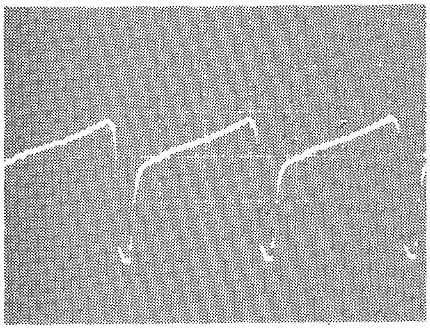
135a *20V/5msec/div.*
35Vp-p



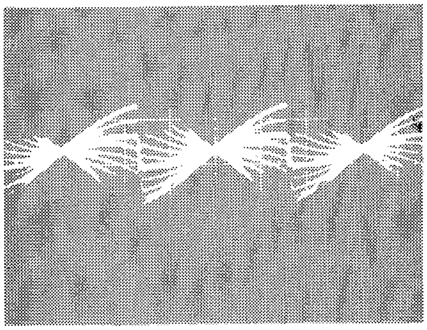
135b *20V/20µsec/div.*
35Vp-p



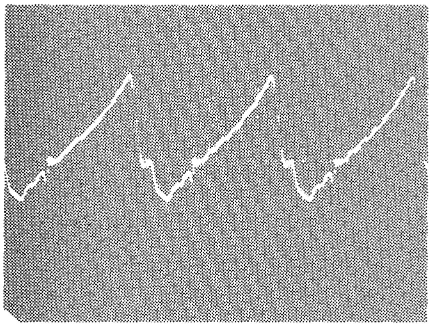
136a *20V/5msec/div.*
74Vp-p



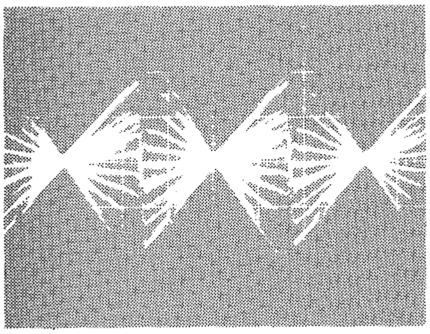
136b *20V/20µsec/div.*
62Vp-p



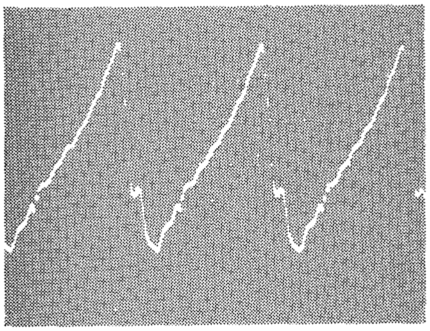
137a *1V/5msec/div.*
2.8Vp-p



137b *1V/20µsec/div.*
2.8Vp-p

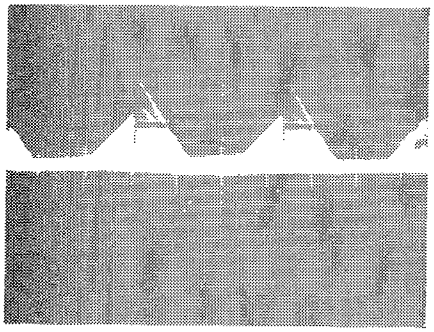


138a *5V/5msec/div.*
25Vp-p

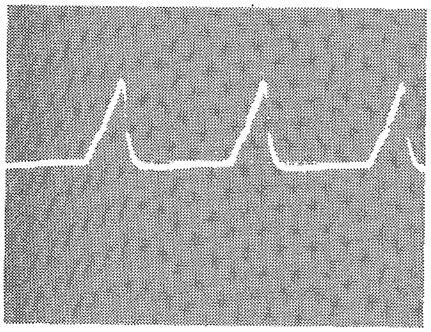


138b *5V/20µsec/div.*
24Vp-p

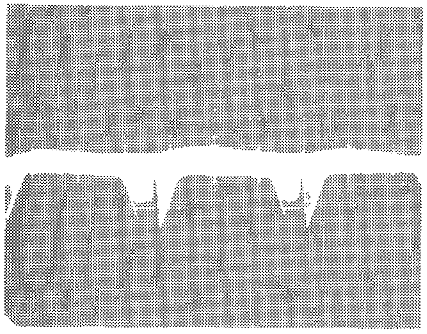
WAVEFORMS (Continued)



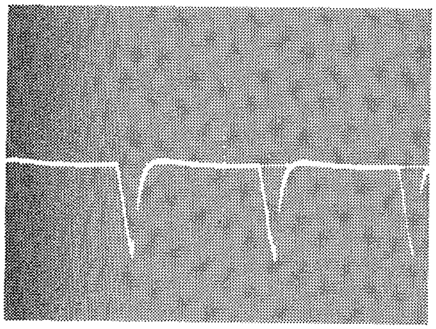
139a 5V/5msec/div.
9.0Vp-p AC coupled



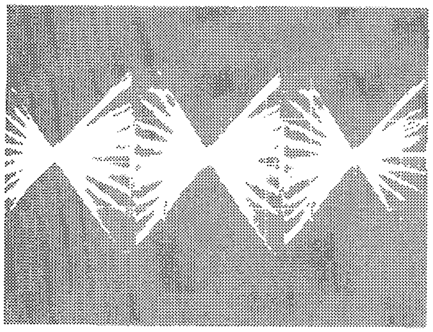
139b 5V/20µsec/div.
9.0Vp-p AC coupled



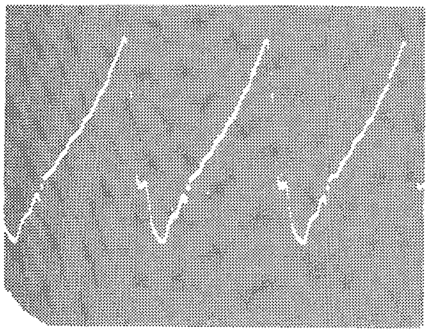
140a 2V/5msec/div.
4.5Vp-p AC coupled



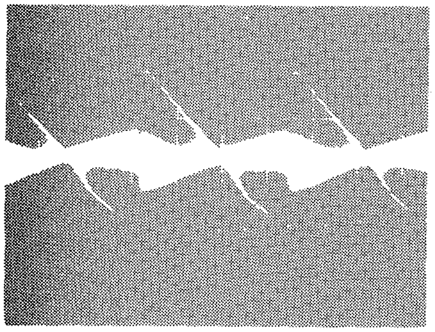
140b 2V/20µsec/div.
4.5Vp-p AC coupled



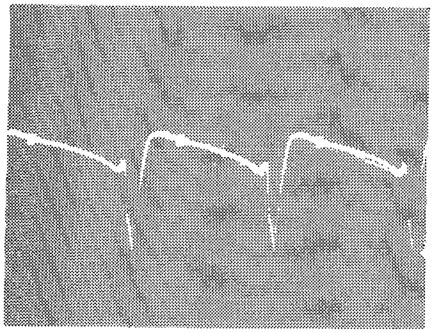
141a 5V/5msec/div.
23Vp-p



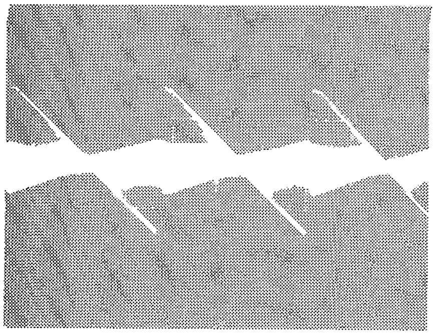
141b 5V/20µsec/div.
23Vp-p



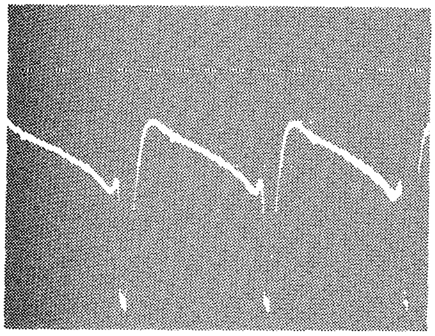
142a 2V/5msec/div.
8.0Vp-p



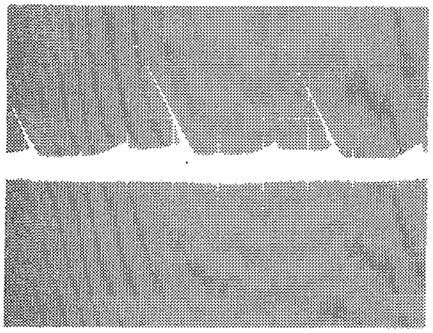
142b 2V/20µsec/div.
7.5Vp-p



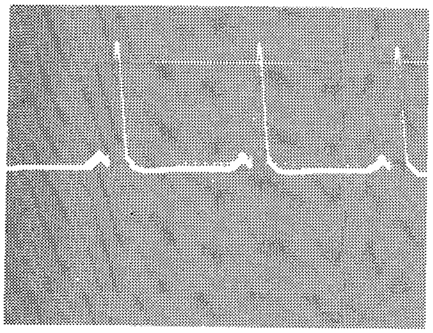
143a 20V/5msec/div.
65Vp-p



143b 10V/20µsec/div.
42Vp-p

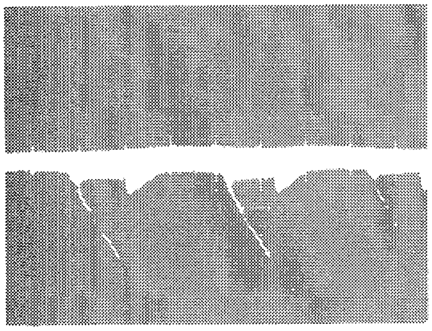


144a 10V/5msec/div.
27Vp-p AC coupled

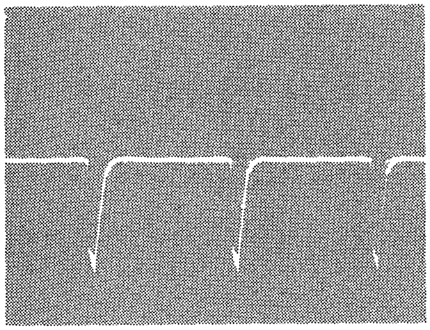


144b 10V/20µsec/div.
27Vp-p AC coupled

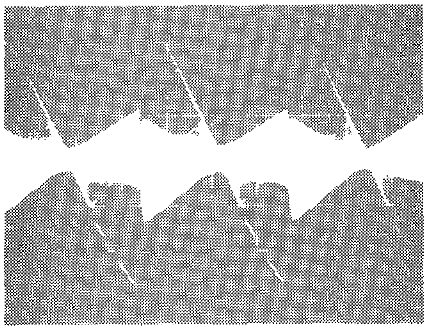
WAVEFORMS (Continued)



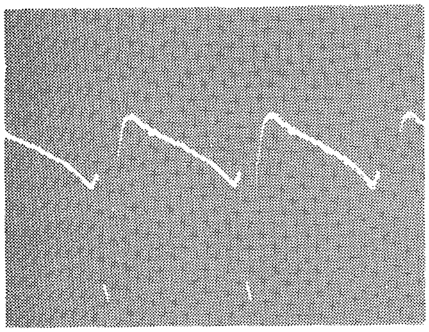
145a *10V/5msec/div.*
24Vp-p AC coupled



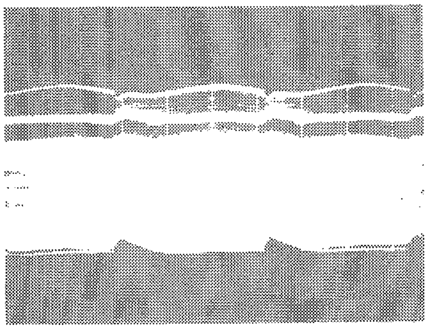
145b *10V/20μsec/div.*
24Vp-p AC coupled



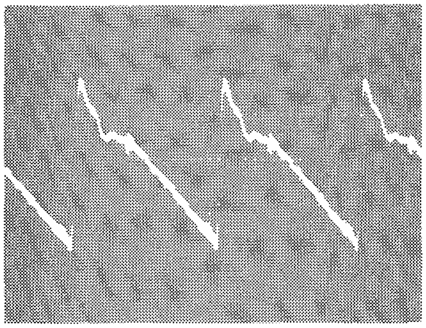
146a *10V/5msec/div.*
64Vp-p



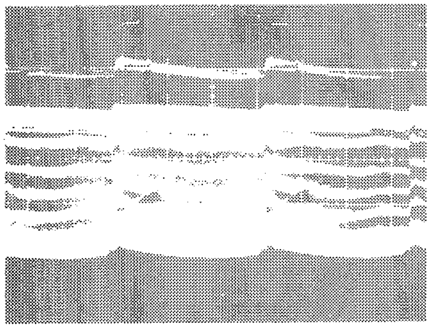
146b *10V/20μsec/div.*
42Vp-p



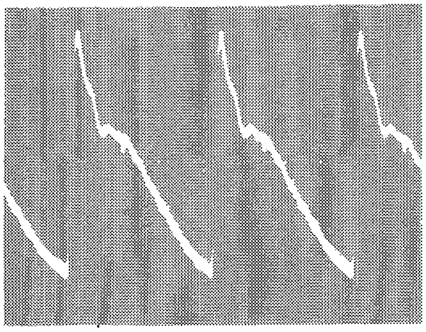
147a *1V/5msec/div.*
3.9Vp-p



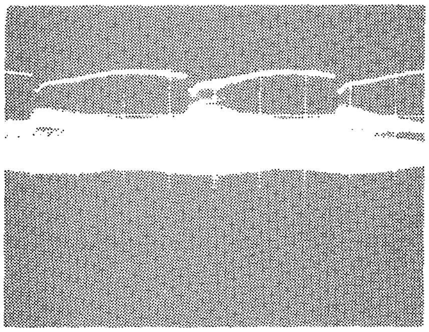
147b *1V/20μsec/div.*
3.9Vp-p



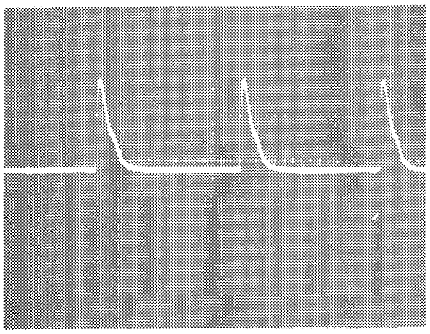
148a *5V/5msec/div.*
26Vp-p



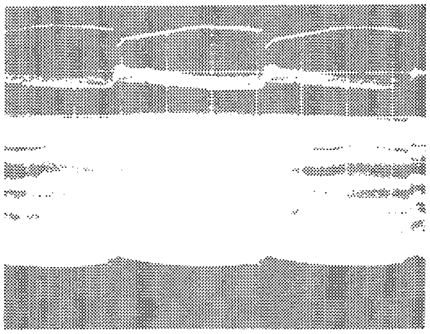
148b *5V/20μsec/div.*
28Vp-p



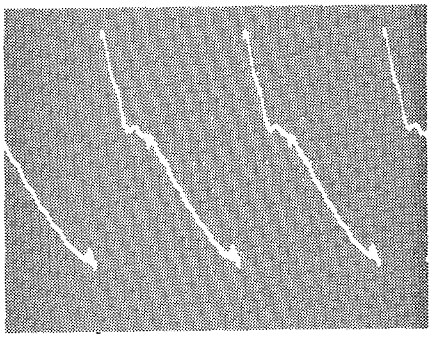
149a *5V/5msec/div.*
10Vp-p



149b *5V/20μsec/div.*
10Vp-p

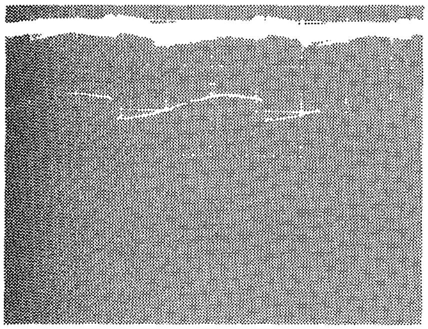


150a *5V/5msec/div.*
27Vp-p

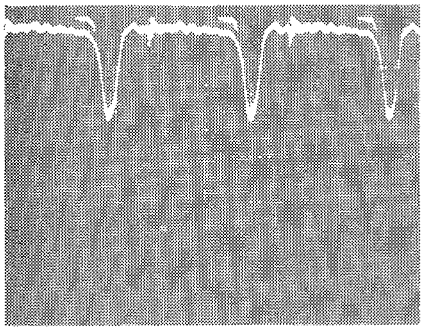


150b *5V/20μsec/div.*
27Vp-p

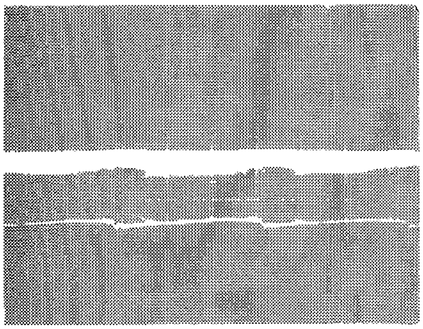
WAVEFORMS (Continued)



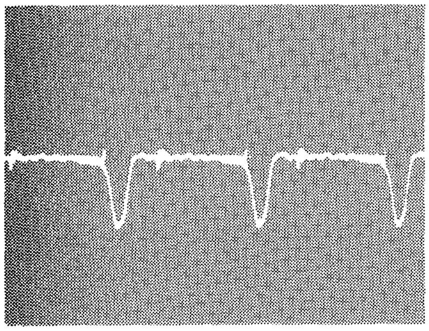
(151a) *0.5V/5msec/div.*
1.2Vp-p



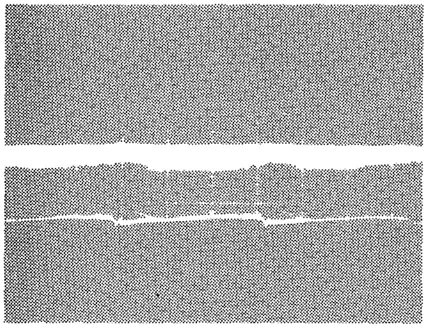
(151b) *0.5V/20µsec/div.*
1.2Vp-p



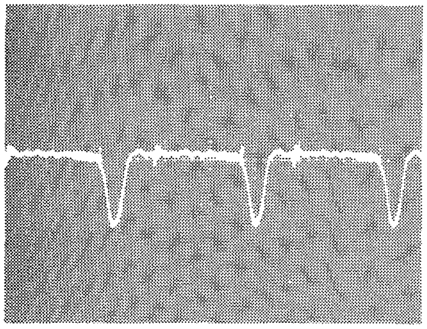
(152a) *5V/5msec/div.*
8.0Vp-p



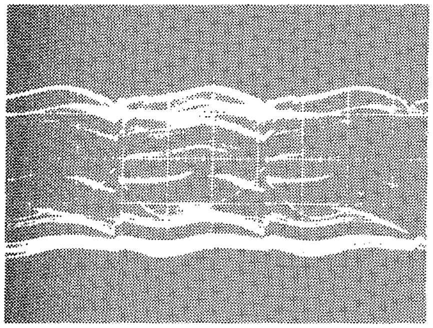
(152b) *5V/20µsec/div.*
8.0Vp-p



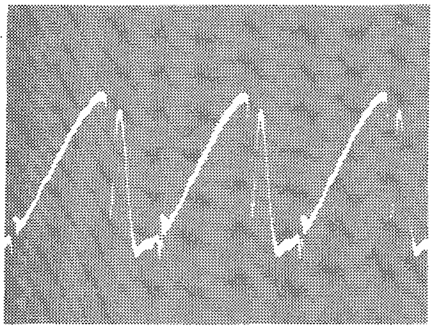
(153a) *5V/5msec/div.*
8.0Vp-p



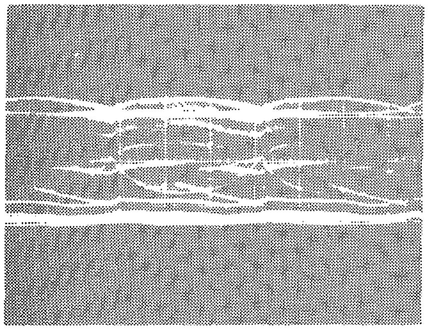
(153b) *5V/20µsec/div.*
8.0Vp-p



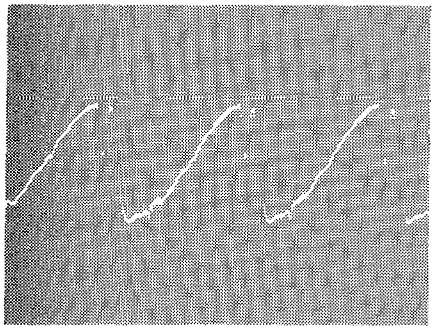
(154a) *0.5V/5msec/div.*
1.8Vp-p



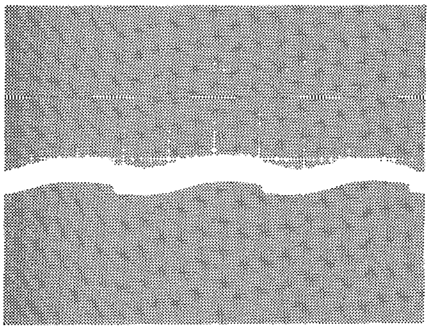
(154b) *0.5V/20µsec/div.*
1.8Vp-p



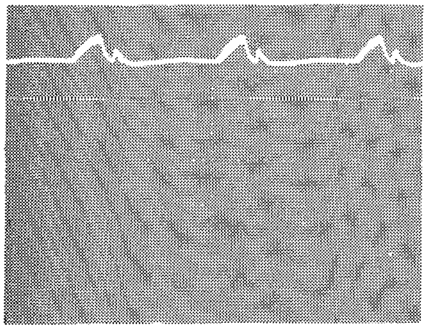
(155a) *5V/5msec/div.*
14Vp-p



(155b) *5V/20µsec/div.*
14Vp-p

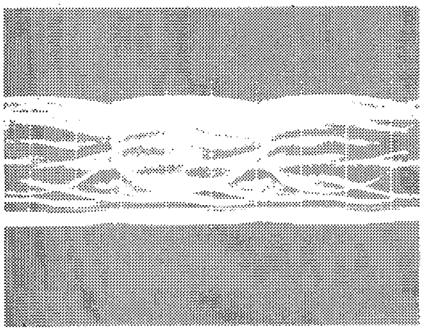


(156a) *1V/5msec/div.*
3.0Vp-p AC coupled

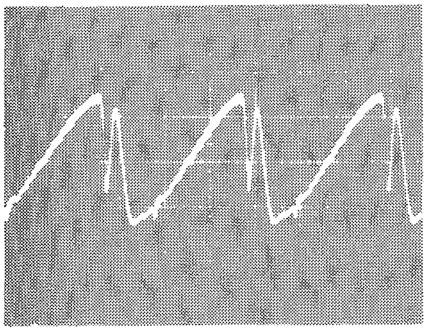


(156b) *5V/20µsec/div.*
3.0Vp-p

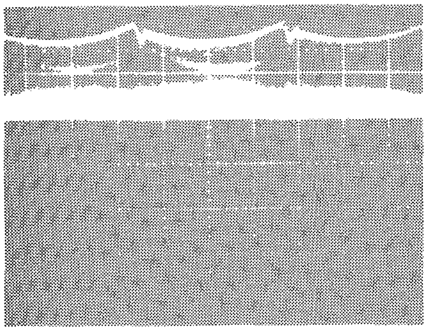
WAVEFORMS (Continued)



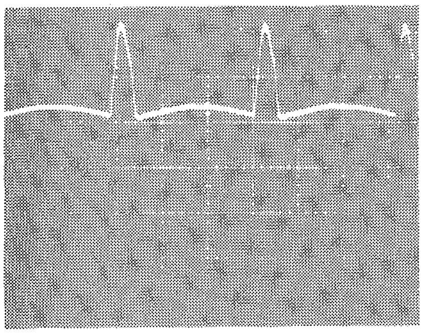
(157a) *5V/5msec/div.*
15Vp-p



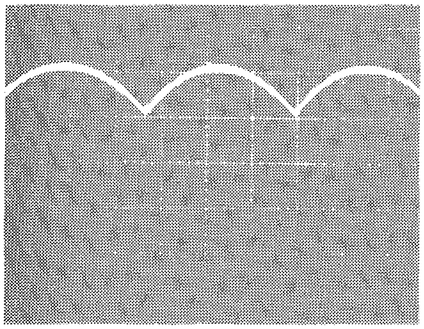
(157b) *5V/20µsec/div.*
15Vp-p



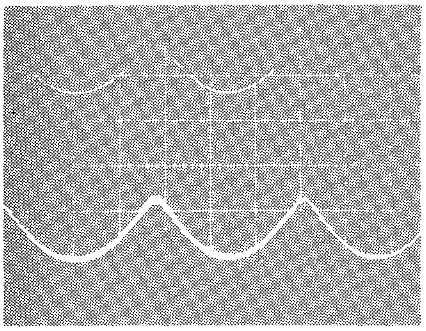
(158a) *100V/5msec/div.*
210Vp-p



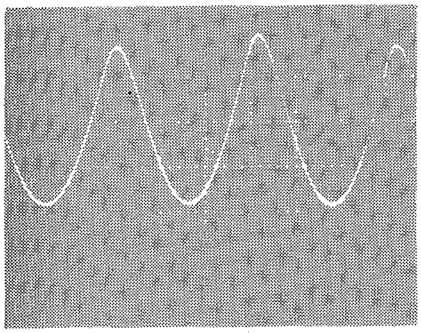
(158b) *100V/20µsec/div.*
210Vp-p



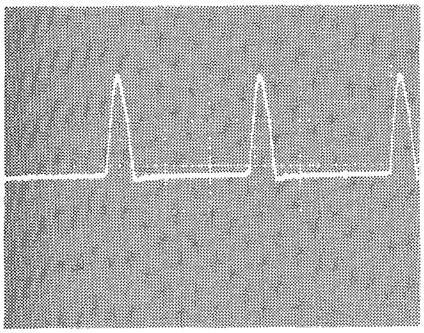
(159) *0.5V/5msec/div.*
0.6Vp-p



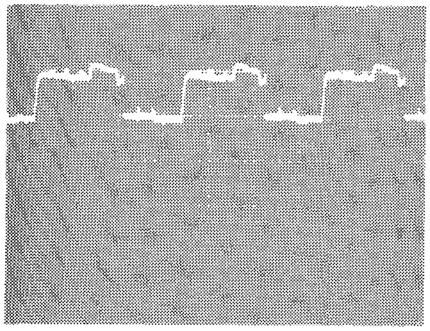
(160a) *100V/5msec/div.*
500Vp-p AC coupled



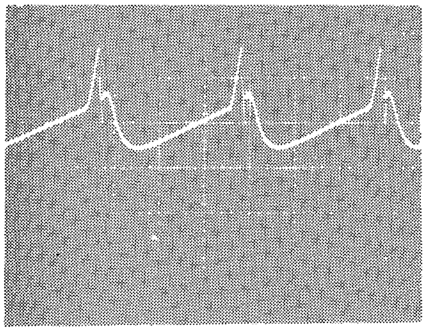
(160b) *100V/20µsec/div.*
370Vp-p AC coupled



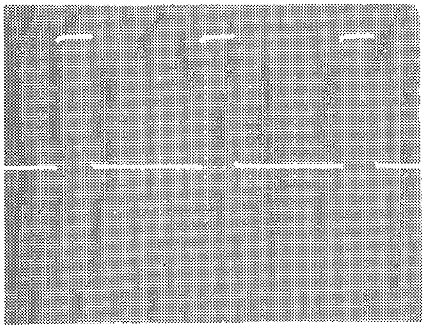
(161) *10V/20µsec/div.*
22Vp-p



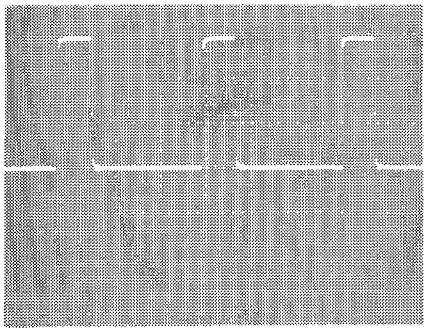
(162) *100V/20µsec/div.*
125Vp-p



(163) *1V/20µsec/div.*
2.3Vp-p

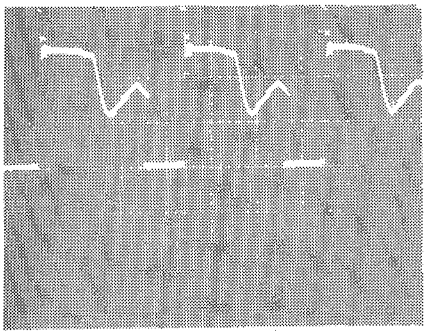


(164) *5V/20µsec/div.*
14.5Vp-p

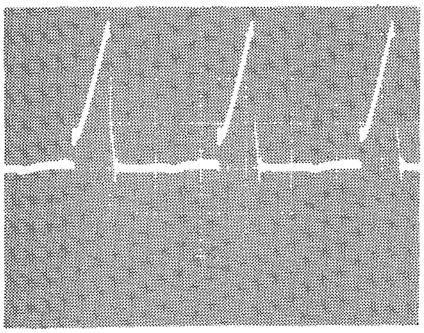


(165) *5V/20µsec/div.*
14.5Vp-p

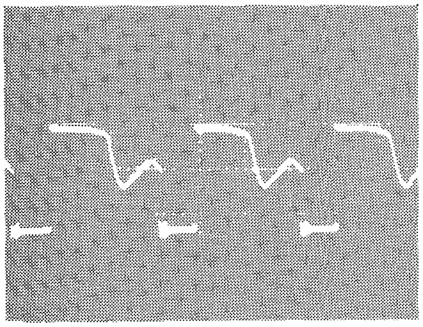
WAVEFORMS (Continued)



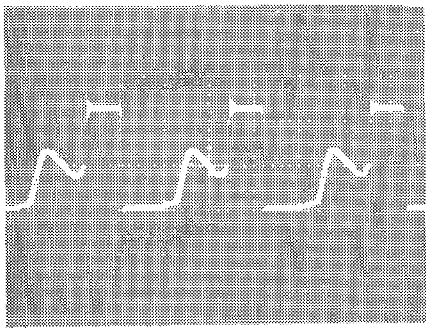
(166) *100V/20μsec/div.*
360Vp-p



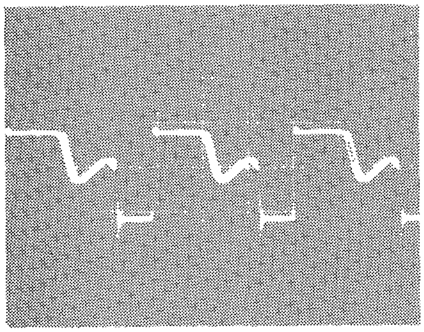
(167) *0.2V/20μsec/div.*
0.65Vp-p



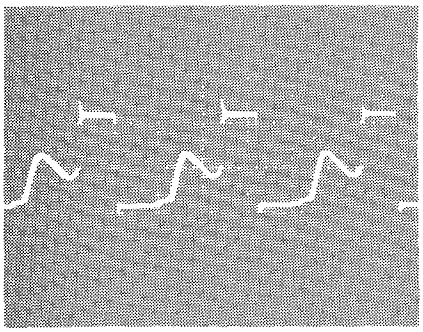
(168) *50V/20μsec/div.*
165Vp-p



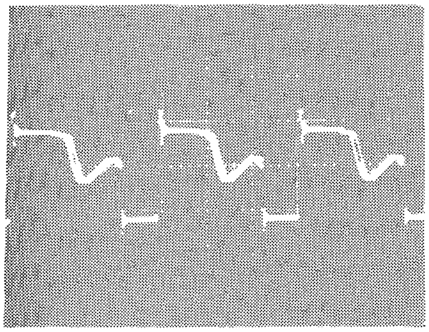
(169) *50V/20μsec/div.*
165Vp-p



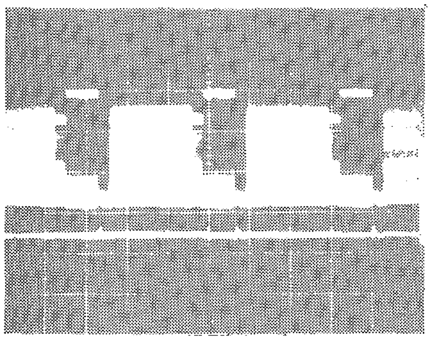
(170) *20V/20μsec/div.*
60Vp-p



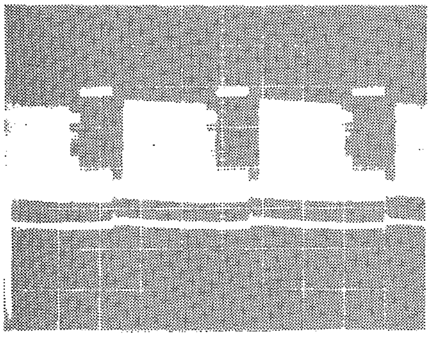
(171) *20V/20μsec/div.*
57Vp-p



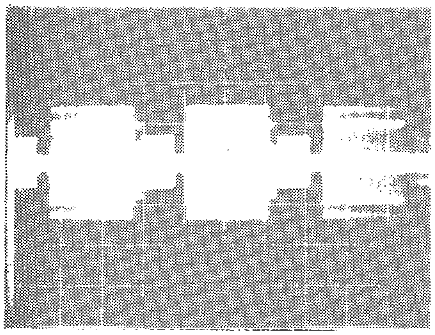
(172) *20V/20μsec/div.*
75Vp-p



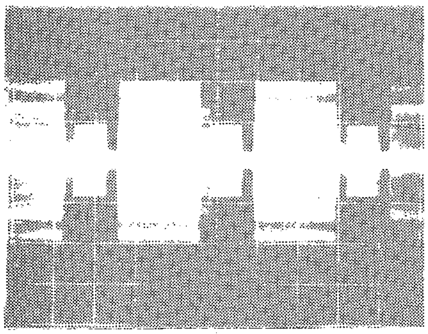
(173) *0.5V/5msec/div.*
1.85Vp-p AC coupled



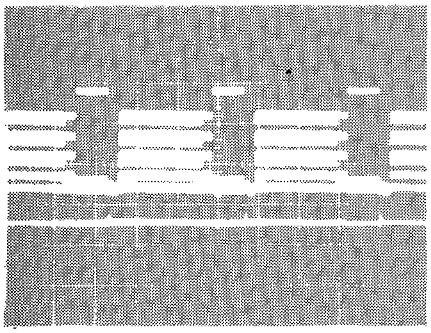
(174) *0.5V/5msec/div.*
1.75Vp-p AC coupled



(175) *0.2V/5msec/div.*
0.6Vp-p AC coupled

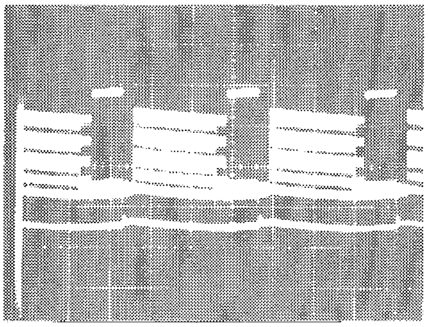


(176) *0.2V/5msec/div.*
0.8Vp-p AC coupled

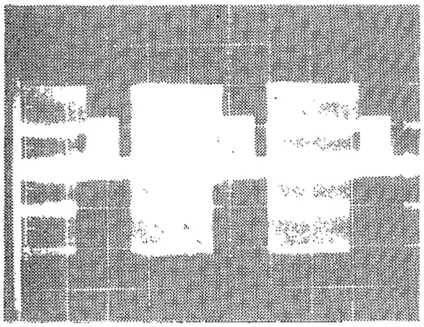


(177) *0.5V/5msec/div.*
1.7Vp-p AC coupled

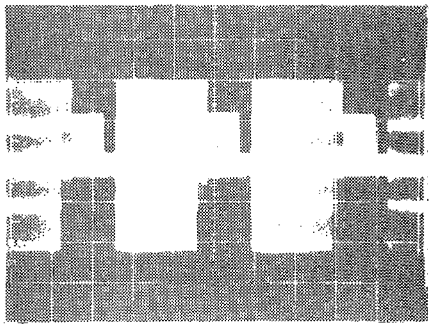
WAVEFORMS (Continued)



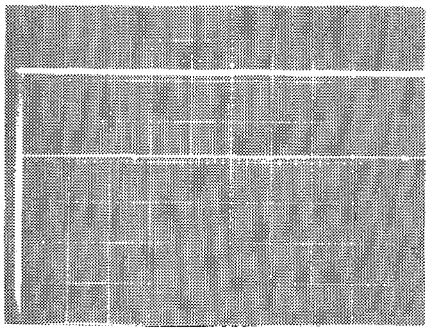
⑰⑧ *0.5V/5msec/div.*
1.8Vp-p AC coupled



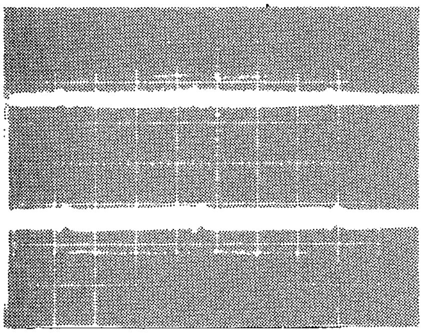
⑰⑨ *0.2V/5msec/div.*
0.84Vp-p AC coupled



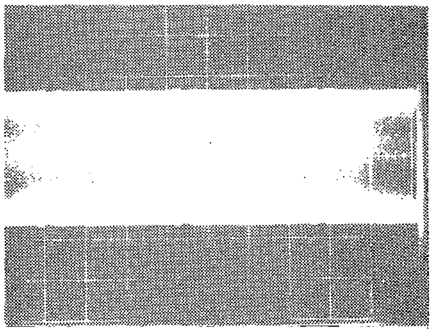
(180) *0.2V/5msec/div.*
1.08Vp-p AC coupled



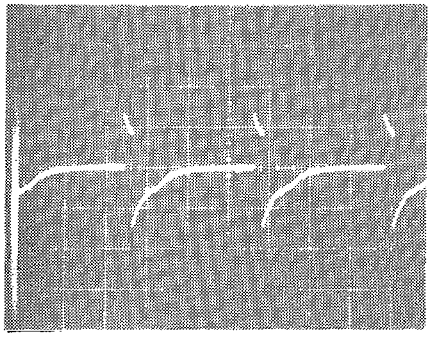
(181) *2.0V/5msec/div.*
4.4Vp-p



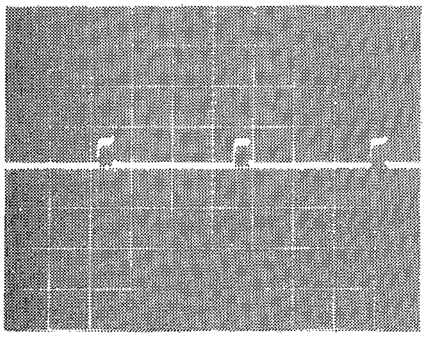
(182) *0.2V/5msec/div.*
0.9Vp-p AC coupled



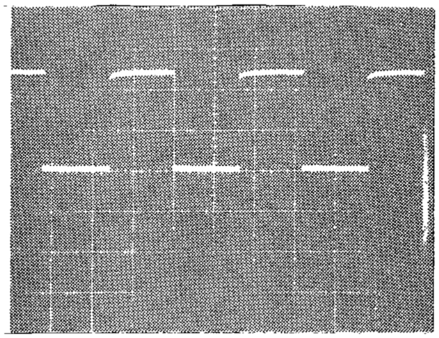
(183) *0.2V/5msec/div.*
0.68Vp-p AC coupled



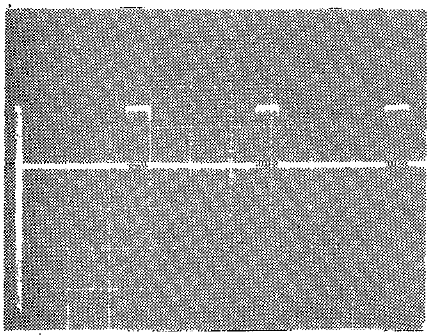
(184) *1.0V/20μsec/div.*
2.8Vp-p



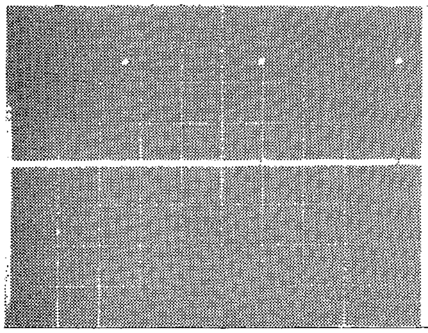
(185) *2.0V/5msec/div.*
4.0Vp-p



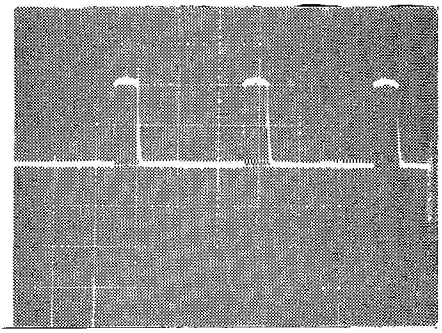
(186) *2.0V/20μsec/div.*
5.0Vp-p



(187) *2.0V/20μsec/div.*
4.8Vp-p

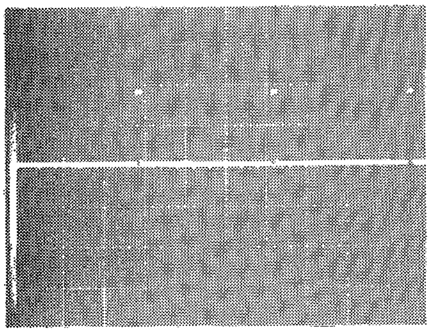


(188) *2.0V/5msec/div.*
5.0Vp-p

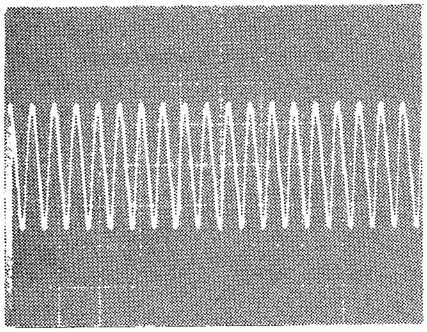


(189) *2.0V/20μsec/div.*
4.2Vp-p

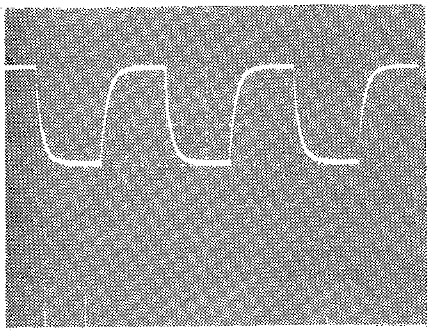
WAVEFORMS (Continued)



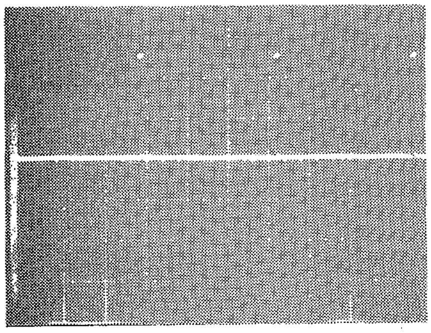
⑲⓪ 2.0V/5msec/div.
3.6Vp-p



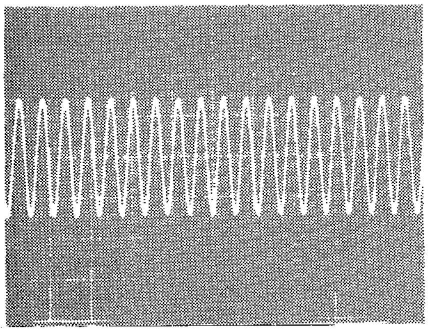
⑲① 1.0V/0.1µsec/div.
3.2Vp-p AC coupled



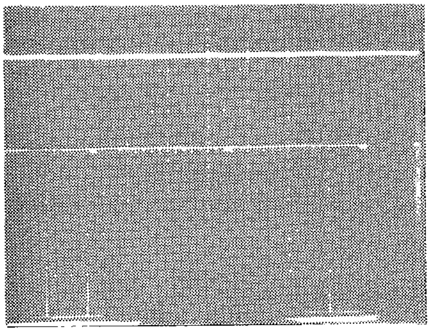
⑲② 2.0V/20µsec/div.
5.0Vp-p



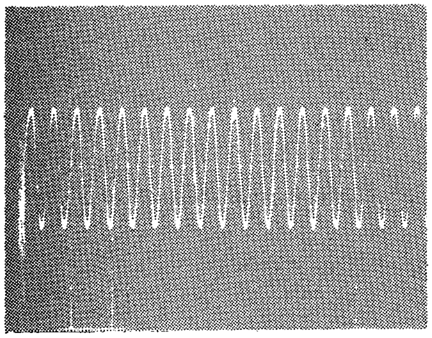
⑲③ 2.0V/5msec/div.
5.0Vp-p



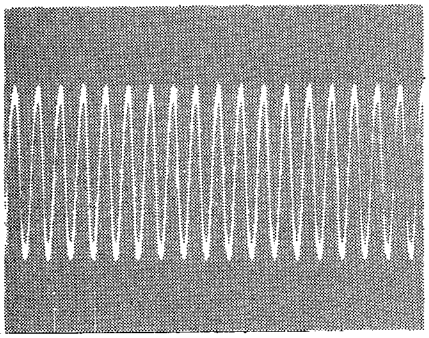
⑲④ 0.5V/0.5µsec/div.
1.5Vp-p AC coupled



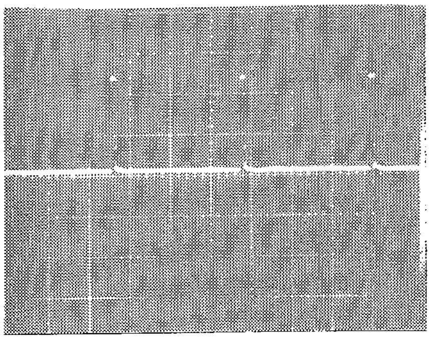
⑲⑤ 2.0V/5msec/div.
4.8Vp-p



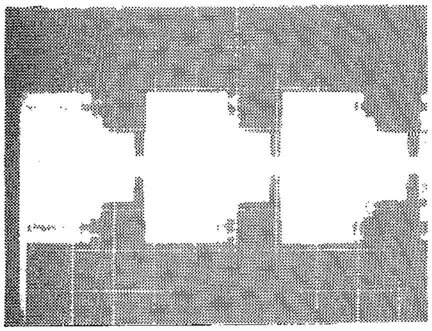
⑲⑥ 0.5V/0.5µsec/div.
1.5Vp-p AC coupled



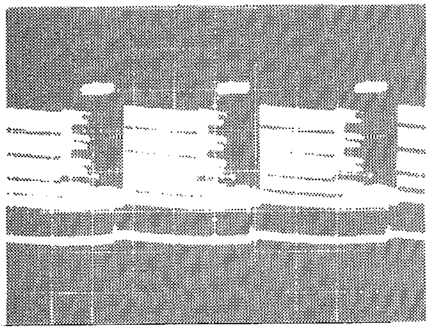
⑲⑦ 0.1V/0.5µsec/div.
0.44Vp-p AC coupled



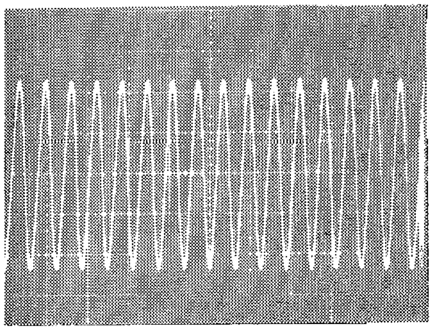
⑲⑧ 1.0V/20µsec/div.
2.3Vp-p



⑲⑨ 0.2V/5msec/div.
0.76Vp-p



②⓪⓪ 0.5V/5msec/div.
2.0Vp-p AC coupled



(201) 1.0V/0.2µsec/div.
4.8Vp-p AC coupled

REPLACEMENT PARTS

BEFORE REPLACING PARTS, READ THE FOLLOWING:

Approved Substitute Stock Numbers—Before ordering stock numbers in the parts list, look for an approved substitute stock number in the current Price Schedule. This will minimize your service time and avoid ordering parts you already have in stock.

PRODUCT SAFETY NOTE—Components marked with a (*) have special characteristics important to safety. Before replacing any of these components, read carefully the **SAFETY PRECAUTIONS** in the basic service data. Do not degrade the safety of the set through improper servicing. Although assemblies as a whole may not be marked with a (*), replacement of assemblies with other assemblies not approved may result in a safety hazard.

Warranty Status of Assemblies and Parts—All assemblies and components shown in this parts list are eligible for warranty exchange or replacement except those with a (•) shown to the left of the Description. Assemblies and components with a (•) to the left of the Description are NOT eligible for warranty exchange or replacement.

Warranty replacement of cabinet parts requires the approval of a Thomson Consumer Electronics Field Service Manager.

Warranty Status and Specifications of assemblies and components are subject to change without notice. Consult the TCE Parts Pricing Microfiche for the latest warranty status information.

@NOTE: When ordering components that are listed more than once in this parts list, always adhere to the serial number application guidelines given in the description column. If a serial number application guideline is not given, always select the component with a value, rating, other specification or identification marking(s) that match those of the corresponding component in the instrument you are servicing.

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CTC169BU	2	CTC169PE	4	CTC169PU	2
CTC169BW	2	CTC169PF	4	CTC169PV	2
CTC169HM	1	CTC169PG	4	CTC169PW	2
CTC169HN	1	CTC169PH	4	CTC169PX	2

CTC169PTV

CHASSIS ASSEMBLIES

CHASSIS FAMILY 1

CTC169BL
CTC169BM
CTC169BN
CTC169HM
CTC169HN

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
C1201	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C1203	190499	1C30179-47A	CAP LYTC 4.7UF M 100V
C1204	174402	2861142-33A	CAPCC 10PF F NPO 50V
C1401	189979	1C30230-47A	CAP LYTC 47UF M 25V
C1402	189979	1C30230-47A	CAP LYTC 47UF M 25V
C1403	193043	1C30230-47A	CAP LYTC 47UF M 25V
C1404	193043	1C30230-47A	CAP LYTC 47UF M 25V
C1405	189978	1C30121-22A	CAP LYTC 220UF M 16V
C1406	181090	2861143-14A	CAPCC 39PF J NPO 50V
C1407	181091	2861143-84A	CAPCC 150PF J NPO 50V CTC169BL
C1407	174414	2861143-74A	CAPCC 120PF J NPO 50V CTC169BM,BN,HM,HN
C1408	189981	1C30150-10A	CAP LYTC 10UF M 50V
C1409	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C1410	210893	1C18571-47A	CAPCC 470PF K X7R 50V
C1411	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C1412	189981	1C30150-10A	CAP LYTC 10UF M 50V
C2301	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C2302	174423	2861146-35Z	CAPCC .01UF K X7R 50V

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
C2303	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C2304	160077	1C30178-47A	CAP LYTC .47UF M 100V
C2305	190551	2861146-75Z	CAPCC .022UF K X7R 50V
C2306	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C2307	190499	1C30179-47A	CAP LYTC 4.7UF M 100V
C2308	174423	2861146-35Z	CAPCC .01UF K X7R 50V CTC169BL,BM,BN
C2308	190543	2861143-94A	CAPCC 180PF J NPO 50V CTC169HM,HN,
C2309	174403	2861142-44A	CAPCC 12PF J NPO 50V
C2310	194440	1C18500-18A	CAPCC 18PF K NPO 50V
C2311	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C2312	174401	2861141-92A	CAPCC 7PF D NPO 50V
C2313	190500	1C31121-18A	CAP LYTC 180UF M 16V
C2314	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C2315	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C2316	200139	2861144-64A	CAPCC 560PF J NPO 50V
C2317	200140	1C18793-10A	CAPCC .01UF Z Z5U 50V
C2601	143879	2841253-92M	CAPCD 1000PF K Z5P 50V
C2602	174412	2861143-64A	CAPCC 100PF J NPO 50V
C2603	181092	2843371-012	CAPCC 91PF J NPO 50V
C2604	174405	2861142-64A	CAPCC 18PF J NPO 50V (SEE NOTE@)
C2604	174406	2861142-74A	CAPCC 22PF J NPO 50V (SEE NOTE@)
C2605	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C2606	192060	1C18562-10A	CAPCC 1000PF K SL 50V
C2701	200141	2821714-224	CAP POLY .1UF K 63V
C2704	174402	2861142-32A	CAPCC 10PF F NPO 50V
C2705	220998	1C30179-10A	CAP LYTC 1UF M 100V
C2706	220998	1C30179-10A	CAP LYTC 1UF M 100V
C2707	174412	2861143-64A	CAPCC 100PF J NPO 50V
C2708	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C2709	220998	1C30179-10A	CAP LYTC 1UF M 100V
C2710	176851	1C30120-33A	CAP LYTC 33UF M 16V
C2711	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C2712	189981	1C30150-10A	CAP LYTC 10UF M 50V
C2715	200436	1C30169-68A	CAP LYTC 6.8UF M 63V
C2717	190520	2821714-228	CAP POLY .22UF K 63V
C2718	174412	2861143-64A	CAPCC 100PF J NPO 50V
C2720	175120	1C30179-68A	CAP LYTC 6.8UF M 100V
C2723	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
C2724	193340	1C18401-10A	CAPCC 100PF J NPO 50V
C2801	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C2802	195691	1C30179-22A	CAP LYTC 2.2UF M 100V
C2803	190551	2861146-75Z	CAPCC .022UF K X7R 50V
C2804	174404	2861142-54A	CAPCC 15PF J NPO 50V
C2805	220998	1C30179-10A	CAP LYTC 1UF M 100V
C2806	151119	1C30179-33A	CAP LYTC 3.3UF M 100V
C2807	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C2808	200142	2861146-65Z	CAPCC .018UF K X7R 50V
C2809	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C2810	190500	1C31121-18A	CAP LYTC 180UF M 16V CTC169BL,HM,HN (SEE NOTE@)
C2810	176851	1C30120-33A	CAP LYTC 33UF M 16V CTC169BM,BN,HM,HN, (SEE NOTE@)
C2811	174406	2861142-74A	CAPCC 22PF J NPO 50V
C2812	174406	2861142-74A	CAPCC 22PF J NPO 50V
C2813	174406	2861142-74A	CAPCC 22PF J NPO 50V
C2814	174412	2861143-64A	CAPCC 100PF J NPO 50V CTC169BL,BM
C2814	190542	2861143-34A	CAPCC 56PF J NPO 50V CTC169BN,HM,HN
C2815	192050	1C18500-27A	CAPCC 27PF K NPO 50V
C2905	174405	2861142-64A	CAPCC 18PF J NPO 50V CTC169BL,HM,HN
C2905	174409	2861143-24A	CAPCC 47PF J NPO 50V CTC169BM,BN
C2909	174405	2861142-64A	CAPCC 18PF J NPO 50V CTC169BL,HM,HN
C2909	190542	2861143-34A	CAPCC 56PF J NPO 50V CTC169BM,BN
C2910	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C2911	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C2918	193036	2861144-55Z	CAPCC 470PF K X7R 50V
C2919	193036	2861144-55Z	CAPCC 470PF K X7R 50V
C2920	200143	2861144-45Z	CAPCC 390PF K X7R 50V
C2927	175397	2861143-95A	CAPCC 180PF K NPO 50V
C2928	181460	2861144-95Z	CAPCC 1000PF K X7R 50
C3101	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3102	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3103	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C3104	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3105	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3106	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3107	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3108	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3109	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3110	174406	2861142-74A	CAPCC 22PF J NPO 50V
C3114	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3115	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C3116	200144	1C18572-68A	CAPCC 6800PF K X7R 50V
C3117	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3119	190542	2861143-34A	CAPCC 56PF J NPO 50V
C3120	190542	2861143-34A	CAPCC 56PF J NPO 50V
C3121	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3123	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3124	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3125	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3126	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3127	192060	1C18562-10A	CAPCC 1000PF K SL 50V
C3128	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3129	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C3201	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C3301	174412	2861143-64A	CAPCC 100PF J NPO 50V
C3302	174412	2861143-64A	CAPCC 100PF J NPO 50V
C3303	174412	2861143-64A	CAPCC 100PF J NPO 50V
C3304	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C3305	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3307	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3308	197600	1C18572-10A	CAPCC 1000PF K X7R 50V
C3309	197600	1C18572-10A	CAPCC 1000PF K X7R 50V
C3310	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
C3311	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3312	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3313	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C3314	178188	2861144-14A	CAPCC 220PF J NPO 50V
C3315	174412	2861143-64A	CAPCC 100PF J NPO 50V
C3316	192052	1C18501-22A	CAPCC 220PF K NPO 50V (SEE NOTE@)
C3316	202904	1C18501-56A	CAPCC 560PF K NPO 50V (SEE NOTE@)
C3317	174404	2861142-54A	CAPCC 15PF J NPO 50V
C3318	174409	2861143-24A	CAPCC 47PF J NPO 50V
C3319	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3320	174409	2861143-24A	CAPCC 47PF J NPO 50V
C3321	174409	2861143-24A	CAPCC 47PF J NPO 50V
C3322	220998	1C30179-10A	CAP LYTC 1UF M 100V
C3323	192049	1C18400-82A	CAPCC 82PF J NPO 50V
C3602	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C3603	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C3604	191959	1C30130-47A	CAP LYTC 47UF M 25V
C3605	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C3606	200140	1C18793-10A	CAPCC .01UF Z Z5U 50V
C4002	190538	2821785-005 *	CAPCD 680PF M Z5P 1KV
C4005	190538	2821785-005 *	CAPCD 680PF M Z5P 1KV
C4006	250102	2870613-109 *	CAP CAPRISTOR
C4007	190561	2875500-009 *	CAP LYTC 820UF K 200V
C4008	195697	1C10106-21A *	CAPCD 5000PF M Z5V 120V
C4009	195749	2821785-002	CAPCD .012UF M Z5U 250V
C4101	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C4102	195691	1C30279-22A	CAP LYTC 2.2UF M 100V
C4103	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C4104	190499	1C30279-47A	CAP LYTC 4.7UF K 100V (SEE NOTE@)
C4104	189982	1C30250-15A	CAP LYTC 15UF M 50V (SEE NOTE@)
C4105	181099	2821714-330	CAP POLY .33UF J 50V
C4106	174421	2861145-45Z	CAPCC 2200PF K X7R 50V
C4107	143879	2841253-92M	CAPCD 1000PF K Z5P 50V
C4108	193043	1C31150-47A	CAP LYTC 47UF M 50V
C4109	200145	2841260-42M	CAPCD 1800PF K Z5P 250V
C4110	143242	1490360-006 *	CAPCD 470PF J N1500 1.5KV
C4111	190538	2821785-005	CAPCD 680PF M Z5P 1KV
C4112	201619	1C20120-09A *	CAP POLY 5600PF J 800V
C4113	195699	2861146-85Z	CAPCC .027UF K X7R 50V
C4115	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C4118	190496	1C30241-47A	CAP LYTC 470UF M 35V
C4136	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C4138	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C4139	179277	2861147-25Z	CAPCC .047UF J X7R 50V

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
C4140	190538	2821785-005	CAPCD 680PF M Z5P 1KV
C4141	200147	2875500-10A *	CAP LYTC 470UF M 180V
C4142	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C4143	175119	1C30242-10A	CAP LYTC 1000UF M 35V
C4144	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C4145	175119	1C30142-10A	CAP LYTC 1000UF M 35V (85 DEG)(SEE NOTE@)
C4145	190721	1C31142-10A	CAP LYTC 1000UF M 35V (105 DEG)(SEE NOTE@)
C4146	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C4147	190497	1C30251-68A	CAP LYTC 680UF K 50V
C4148	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C4149	190497	1C30251-68A	CAP LYTC 680UF K 50V
C4150	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C4151	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C4152	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C4153	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
C4154	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C4155	210893	1C18451-47A	CAPCC 470PF J N750 50V
C4301	220998	1C30179-10A	CAP LYTC 1UF M 100V
C4302	195692	2861146-55Z	CAPCC .015UF K X7R 50V
C4303	190551	2861146-75Z	CAPCC .022UF K X7R 50V
C4304	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
C4305	190548	2861145-85Z	CAPCC 4700PF K X7R 50V
C4306	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C4307	175120	1C30179-68A	CAP LYTC 6.8UF M 100V
C4309	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C4310	200153	2821714-320	CAP POLY .047UF J 63V
C4311	190499	1C31159-47A	CAP LYTC 4.7UF M 50V
C4312	149727	2841254-32M	CAPCD 1800PF K Z5P 50V
C4313	200148	1C18672-47A	CAPCC 4700PF M X7R 50V
C4401	206009	XX80408-465 *	CAP POLY .0162UF HP 1.6KV
C4402	200149	1C20120-06A *	CAP POLY .056UF J 400V
C4405	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C4406	143242	1490360-006 *	CAPCD 470PF J N1500 1.5KV
C4407	190534	2821785-001 *	CAPCD 4700PF K Z5P 250V
C4502	179623	2841261-12M	CAPCD 5600PF K Z5P 250V
C4503	200151	1490001-72A *	CAP LYTC 2200UF K 35V
C4504	160077	1C30178-47A	CAP LYTC .47UF M 100V
C4505	189982	1C30250-15A	CAP LYTC 15UF M 50V
C4511	200439	1C20110-46A *	CAP POLY .99UF J 250V
C4512	195691	1C30179-22A	CAP LYTC 2.2UF M 100V
C4518	181099	2821714-330	CAP POLY .33UF J 50V
C4519	181099	2821714-330	CAP POLY .33UF J 50V
C4520	151578	1C30240-33A	CAP LYTC 33UF M 35V
C4521	181230	2861146-26Z	CAPCC 8200PF K X7R 50V (SEE NOTE@)
C4521	205192	1C15199-01A	CAPCD 8200PF K X7R 50V (SEE NOTE@)
C4522	200153	2821714-320	CAP POLY .047UF J 63V
C4523	179277	2861147-25Z	CAPCC .047UF J X7R 50V
C4524	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C4525	160077	1C30178-47A	CAP LYTC .47UF M 100V
C4610	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C4611	189981	1C30150-10A	CAP LYTC 10UF M 50V
C4612	176302	1C30111-10A	CAP LYTC 100UF M 10V
C4701	146158	2821714-821	CAP POLY .056UF K 250V
C4702	190538	2821785-005	CAPCD 680PF M Z5P 1KV
C4703	190479	1490001-062	CAP LYTC 47UF M 250V
C4704	190538	2821785-005	CAPCD 680PF M Z5P 1KV
C4705	190497	1C30251-68A	CAP LYTC 680UF K 50V
C4706	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C4711	193043	1C30130-47A	CAP LYTC 47UF M 25V
C4712	192846	1C30120-68A	CAP LYTC 68UF M 16V
C4713	190538	2821785-005	CAPCD 680PF M Z5P 1KV
C4714	194581	1C30131-10A	CAP LYTC 100UF M 25V
C4715	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C4801	196060	2841204-05A	CAP LYTC 10UF M 35V
C4802	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C4807	189981	1C30150-10A	CAP LYTC 10UF M 50V
C4808	192846	1C30120-68A	CAP LYTC 68UF M 16V
C4811	181460	2861144-95Z	CAPCC 1000PF K X7R 50V (SEE NOTE@)
C4811	174421	2861145-45Z	CAPCC 2200PF K X7R 50V (SEE NOTE@)
C4812	155050	2861144-95M	CAPCC 1000PF K SL 50V
C4813	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C4814	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C4815	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C4816	204791	2821714-209	CAP POLY 5600PF K 63V
C4817	190520	2841258-92M	CAPCD 150PF K Z5P 250V
C4901	141722	2841258-92M	CAPCD 150PF K Z5P 250V
C4902	202011	2821714-324	CAP POLY .1UF J 63V
C4903	143879	2841253-92M	CAPCD 1000PF K Z5P 50V
C4905	189981	1C30150-10A *	CAP LYTC 10UF M 50V
C4906	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
CF1201	195702	1496278-005	FILTER CERAMIC
CF2301	181125	2821737-001	FILTER
CR1401	176746	99201-210	DIODE ZENER 5.6V .4W
CR1402	176746	99201-210	DIODE ZENER 5.6V .4W
CR1403	176746	99201-210	DIODE ZENER 5.6V .4W
CR1404	176746	99201-210	DIODE ZENER 5.6V .4W
CR1405	192848	99201-215	DIODE ZENER 9.1V .4W
CR1406	164874	1471872-010	DIODE
CR2701	164717	1471872-006	DIODE
CR2702	164717	1471872-006	DIODE
CR2703	164717	1471872-006	DIODE
CR2704	164717	1471872-006	DIODE
CR2705	164717	1471872-006	DIODE
CR2706	164717	1471872-006	DIODE
CR2802	164717	1471872-006	DIODE
CR2901	164717	1471872-006	DIODE
CR2903	164717	1471872-006	DIODE
CR2907	164717	1471872-006	DIODE
CR2908	164717	1471872-006	DIODE
CR3101	176746	99201-210	DIODE ZENER 5.6V .4W
CR3102	164717	1471872-006	DIODE
CR3103	164717	1471872-006	DIODE
CR3301	164717	1471872-006	DIODE
CR3302	164717	1471872-006	DIODE
CR3601	200155	99201-328	DIODE ZENER 33V .4W
CR4001	147015	2811925-002	DIODE
CR4002	147015	2811925-002	DIODE
CR4003	147015	2811925-002	DIODE
CR4004	147015	2811925-002	DIODE
CR4101	207878	2820546-002	DIODE
CR4102	164717	1471872-006	DIODE
CR4105	200156	2820546-005	DIODE (546-5) (SEE NOTE@)
CR4105	140971	1476171-033	DIODE (147) (SEE NOTE@)
CR4106	176296	1476171-031	DIODE
CR4111	202055	1F05008-25A *	DIODE B+ REG KIT
CR4112	164874	1471872-010	DIODE
CR4115	136634	99201-219	DIODE ZENER 13V .4W
CR4116	200157	2820545-007	DIODE
CR4117	176296	1476171-031 *	DIODE
CR4118	164590	2820545-002	DIODE
CR4119	164590	2820545-002	DIODE
CR4120	164590	2820545-002	DIODE
CR4121	136634	99201-219	DIODE ZENER 13V .4W
CR4122	200158	99202-103	DIODE ZENER 3V 1W
CR4123	176746	99201-210	DIODE ZENER 5.6V .4W
CR4302	164717	1471872-006	DIODE
CR4303	161871	99201-214	DIODE ZENER 8.2V .4W
CR4304	164717	1471872-006	DIODE
CR4305	164717	1471872-006	DIODE
CR4401	198596	XX44001-602	DIODE
CR4402	164589	2820545-005	DIODE
CR4403	139706	1471872-008	DIODE
CR4404	164717	1471872-006	DIODE
CR4501	164717	1471872-006	DIODE
CR4502	139706	1471872-008	DIODE
CR4503	129938	99201-211	DIODE ZENER 6.2V .4W
CR4504	164589	2820545-004	DIODE
CR4511	164717	1471872-006	DIODE
CR4512	192848	99201-215	DIODE ZENER 9.1V .4W
CR4513	164717	1471872-006	DIODE
CR4514	130044	99201-216	DIODE ZENER 10V .4W
CR4515	157301	1471872-024	DIODE
CR4516	164717	1471872-006	DIODE
CR4606	161081	99201-310	DIODE ZENER 5.6V .4W
CR4701	176296	1476171-031	DIODE
CR4702	153672	1476171-044	DIODE
CR4705	176296	1476171-031	DIODE
CR4709	196062	2820500-001	DIODE
CR4710	164717	1471872-006	DIODE (031)(SEE NOTE@)
CR4710	139706	1471872-008	DIODE (048)(SEE NOTE@)
CR4712	209741	99201-314	DIODE ZENER 8.2V .4W
CR4713	153672	1476171-044	DIODE

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
CR4803	176296	1476171-031	DIODE
CR4805	138974	99201-208	DIODE ZENER 4.7V .4W
CR4806	164717	1471872-006	DIODE
CR4901	157301	1471872-024 *	DIODE
CR4902	159429	1497049-006 *	DIODE ZENER 10V .2W
DL2601	193568	1C68110-01A	DELAY LINE
DL2701	195704	2821744-03A	DELAY LINE (SEE NOTE@)
DL2701	206397	2821744-05A	DELAY LINE (SEE NOTE@)
F4001	175425	2821524-118 *	FUSE 5A 125V
FB4101	152102	2843117-001	BEAD
FB4102	152102	2843117-001	BEAD
FB4103	153328	2843165-004	BEAD
FB4301	152103	2843117-002	BEAD
FB4302	152103	2843117-002	BEAD
FB4401	204792	1Z02001-01A	COIL
FB4402	206390	2843117-012	BEAD
FL4001	202584	2G45002-521 *	FILTER AC LINE
J1401	190514	1P21002-41A	JACK PHONO VID IN 1
J1402	190514	1P21002-41A	JACK PHONO VID IN 2
J1403	190514	1P21002-41A	JACK PHONO SEL VID OUT
J1404	195705	1P24004-01A	SOCKET SVHS
J3001	200160	XX10005-030	CONNECTOR 10 PIN FPA
J4901	190476	1466404-320 *	CONNECTOR XRP TEST
JC111	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC112	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC302	181161	93697-005	RES CMF 1/8W 5% .05R
JC303	181161	93697-005	RES CMF 1/8W 5% .05R
JC304	181161	93697-005	RES CMF 1/8W 5% .05R
JC306	181161	93697-005	RES CMF 1/8W 5% .05R
JC402	181161	93697-005	RES CMF 1/8W 5% .05R
JC403	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC404	181161	93697-005	RES CMF 1/8W 5% .05R
JC405	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC406	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC407	181161	93697-005	RES CMF 1/8W 5% .05R
JC408	181161	93697-005	RES CMF 1/8W 5% .05R
JC409	181161	93697-005	RES CMF 1/8W 5% .05R
JC410	181161	93697-005	RES CMF 1/8W 5% .05R
JC411	181161	93697-005	RES CMF 1/8W 5% .05R
JC412	181161	93697-005	RES CMF 1/8W 5% .05R
JC413	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC414	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC415	181161	93697-005	RES CMF 1/8W 5% .05R
JC416	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC422	181161	93697-005	RES CMF 1/8W 5% .05R
JC425	181161	93697-005	RES CMF 1/8W 5% .05R
JC426	181161	93697-005	RES CMF 1/8W 5% .05R
JC427	181161	93697-005	RES CMF 1/8W 5% .05R
JC428	181161	93697-005	RES CMF 1/8W 5% .05R
JC429	181161	93697-005	RES CMF 1/8W 5% .05R
JC430	181161	93697-005	RES CMF 1/8W 5% .05R
JC431	181161	93697-005	RES CMF 1/8W 5% .05R
JC432	181161	93697-005	RES CMF 1/8W 5% .05R
JC445	181161	93697-005	RES CMF 1/8W 5% .05R
JC446	181161	93697-005	RES CMF 1/8W 5% .05R
JC447	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC448	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC449	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC450	181161	93697-005	RES CMF 1/8W 5% .05R
JC451	181161	93697-005	RES CMF 1/8W 5% .05R
JC452	181161	93697-005	RES CMF 1/8W 5% .05R
JC453	205408	XX80440-510	RES CMF 1/10W 10% .0R
L1201	190504	1C55100-02B	COIL 4.5UH
L2301	195708	1C51108-68A	COIL .68UH
L2302	197616	1C51109-22A	COIL 2.2UH
L2303	190506	1C55100-05B	COIL
L2304	190503	1C55100-01B	COIL
L2305	197616	1C51109-22A	COIL 2.2UH
L2306	206035	1471986-037	COIL
L2307	195711	1C51100-18A	COIL 18UH
L2601	181131	2817795-006	COIL ADJ (.41 SQ BODY) (SEE NOTE@)
L2601	216800	1C55100-11A	COIL ADJ (.29 SQ BODY) (SEE NOTE@)
L2602	195710	1C51100-39A	COIL 39UH
L2603	160518	1C51100-10A	COIL 10UH
L2604	158726	2873607-121	COIL 4.7UH
L2702	195710	1C51100-39A	COIL 39UH
L2704	149167	1C51100-68A	COIL
L2705	158726	2873607-121 *	COIL 4.7UH
L2706	175409	2873607-125	COIL 10UH
L2801	195712	1C51100-22A	COIL 22UH
L2802	195712	1C51100-22A	COIL 22UH
L2803	195712	1C51100-22A	COIL 22UH
L2804	200161	1C51100-33A	COIL
L3101	175409	2873607-125	COIL 10UH
L3601	161243	1C51101-10A *	COIL 100UH
L3602	207880	XX60245-200	COIL
L4101	190480	1497050-012	COIL 2.2UH
L4401	196064	1C51400-04A *	COIL
L4701	190729	2873607-133	COIL 47UH
L4702	175409	2873607-125	COIL 10UH
L4803	206391	2G32005-503 *	COIL
Q1201	215495	XX11070-770	TRANSISTOR AUDIO BUFF
Q1401	215496	XX30946-660	TRANSISTOR VIDEO AMP
Q1402	215495	XX11070-770	TRANSISTOR VIDEO AMP
Q1403	143806	1417347-004	TRANSISTOR VIDEO BUFF
Q1404	215495	XX11070-770	TRANSISTOR CHROMA AMP
Q1405	215495	XX11070-770	TRANSISTOR CHROMA BUFF
Q1406	215495	XX11070-770	TRANSISTOR VIDEO BUFF
Q2301	146848	1417405-002	TRANSISTOR IF PREAMP
Q2302	215495	XX11070-770	TRANSISTOR AUDIO IF AMP
Q2701	215495	XX11070-770	TRANSISTOR VIDEO AMP
Q2702	146847	1417306-013	TRANSISTOR VIDEO AMP
Q2703	143806	1417347-004	TRANSISTOR BEAM LIMIT
Q2704	146847	1417306-013	TRANSISTOR HI APL LIMIT
Q2705	145410	1417330-011	TRANSISTOR HI APL LIMIT
Q2707	215495	XX11070-770	TRANSISTOR LUMA BUFFER
Q2709	215495	XX11070-770	TRANSISTOR CLAMP
Q2903	176980	1417309-006	TRANSISTOR RED DRIVER
Q2904	176980	1417309-006	TRANSISTOR BLU DRIVER
Q2905	176980	1417309-006	TRANSISTOR GRN DRIVER
Q2906	143806	1417347-004	TRANSISTOR LUMA BUFFER
Q2908	176980	1417309-006	TRANSISTOR RED OSD
Q2909	176980	1417309-006	TRANSISTOR BLU OSD
Q2910	176980	1417309-006	TRANSISTOR GRN OSD
Q2911	215495	XX11070-770	TRANSISTOR -Y BUFFER
Q2912	219412	XX15047-510	TRANSISTOR HORIZ BLANK BUFFER
Q3101	215496	XX30946-660	TRANSISTOR STBY SENSE
Q3102	215495	XX11070-770	TRANSISTOR RESET
Q3301	145410	1417330-011	TRANSISTOR SYNC SEP
Q3302	215495	XX11070-770	TRANSISTOR BLANKING SW
Q3303	215495	XX11070-770	TRANSISTOR CLAMP
Q3304	215496	XX30946-660	TRANSISTOR CLOSED CAPTION BUFFER
Q4101	203098	XX30910-196	TRANSISTOR REGULATOR OUT (SEE NOTE@)
Q4101	200165	XX10778-600	TRANSISTOR REGULATOR OUT (SEE NOTE@)
Q4105	143802	1417330-010	TRANSISTOR ERROR AMP
Q4106	143802	1417330-010	TRANSISTOR PWM GENER
Q4107	146847	1417306-013	TRANSISTOR PWM AMP
Q4109	146847	1417306-013	TRANSISTOR ERROR AMP
Q4111	215496	XX30946-660	TRANSISTOR CLAMP
Q4301	146847	1417306-013	TRANSISTOR ON/OFF SW
Q4302	200168	XX10905-400	TRANSISTOR HORIZ BUFF
Q4304	146847	1417306-013	TRANSISTOR ON/OFF BUFF
Q4305	215495	XX11070-770	TRANSISTOR ON/OFF BUFF
Q4306	215495	XX11070-770	TRANSISTOR ON/OFF BUFF
Q4401	200167	XX30792-600	TRANSISTOR HORIZ OUT
Q4402	215495	XX11070-770	TRANSISTOR HORIZ SYNC
Q4505	146847	1417306-013	TRANSISTOR V RAMP RESET
Q4506	148970	1417419-001	TRANSISTOR V RAMP LIMIT
Q4507	146847	1417306-013	TRANSISTOR V SYNC KILL
Q4601	146847	1417306-013	TRANSISTOR 5V STBY
Q4702	157627	1417364-003	TRANSISTOR 12V RUN
Q4703	157627	1417364-003	TRANSISTOR 5V RUN
Q4704	157627	1417364-003	TRANSISTOR 9V RUN
Q4705	146847	1417306-013	TRANSISTOR ON/OFF BUFF
Q4801	215496	XX30946-660	TRANSISTOR V PIN
Q4802	200168	XX10905-400	TRANSISTOR V PIN
Q4803	146847	1417306-013	TRANSISTOR V PIN
Q4804	215495	XX11070-770	TRANSISTOR PINCUSHION
Q4901	147665	1417406-003 *	TRANSISTOR XRP

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R1201	174366	93697-427	RES CMF 1/8W 5% 18K
R1203	195942	1B14211-47A	RES CMF 1/10W 5% 470R
R1204	181113	2821716-502	RES CONTROL BRT LEVEL
R1401	181066	93697-371	RES CMF 1/8W 5% 82R
R1402	829143	993230-688 *	RES CF 1/4W 2% 430R
R1403	194917	1B14202-30A	RES CMF 1/10W 2% 3K
R1404	190464	93697-708	RES CMF 1/8W 2% 3K
R1405	181066	93697-371	RES CMF 1/8W 5% 82R
R1406	829143	993230-688 *	RES CF 1/4W 2% 430R
R1407	200440	1B14214-12A	RES CMF 1/10W 5% 120K CTC169BL
R1407	194917	1B14202-30A	RES CMF 1/10W 2% 3K CTC169BN,HN
R1408	181063	93697-370	RES CMF 1/8W 5% 75R CTC169BL
R1408	181066	93697-371	RES CMF 1/8W 5% 82R CTC169BM,BN,HM,HN
R1409	176818	93697-373	RES CMF 1/8W 5% 100R CTC169BL
R1409	174348	93697-397	RES CMF 1/8W 5% 1K CTC169BM,BN,HM,HN
R1410	190466	727832-135 *	RES CC 1/4W 5% 100R CTC169BL
R1410	204793	727832-155 *	RES CC 1/4W 5% 680R CTC169BM,HM
R1410	829143	993230-688 *	RES CF 1/4W 2% 430R CTC169BN,HN
R1411	194917	1B14202-30A	RES CMF 1/10W 2% 3K
R1412	197620	1B14213-11A	RES CMF 1/10W 5% 11K (SEE NOTE@)
R1412	202586	1B14202-11A	RES CMF 1/10W 2% 1.1K (SEE NOTE@)
R1413	181488	93697-685	RES CMF 1/8W 2% 330R
R1414	175321	2819434-704	RES CF 1/4W 2% 2K
R1416	181063	93697-370	RES CMF 1/8W 5% 75R
R1417	174364	93697-721	RES CMF 1/8W 2% 10K
R1418	175417	2819434-414	RES CF 1/4W 5% 5.1K
R1419	205291	XX11064-950	RES CMF 1/8W 2% 910R
R1420	182823	93697-700	RES CMF 1/8W 2% 1.3K
R1421	202585	1B14201-51A	RES CMF 1/10W 2% 510R
R1422	202586	1B14202-11A	RES CMF 1/10W 2% 1.1K CTC169BM,HM
R1422	192100	1B14212-10A	RES CMF 1/10W 5% 1K CTC169BL,BN,HN
R1423	177535	2819434-387	RES CF 1/4W 5% 390R
R1424	159061	93697-369	RES CMF 1/8W 5% 68R
R1425	180816	93697-747	RES CMF 1/8W 2% 120K
R1426	182628	93697-689	RES CMF 1/8W 2% 470R
R1427	189995	93697-704	RES CMF 1/8W 2% 2K
R1428	181488	93697-685	RES CMF 1/8W 2% 330R
R1429	192081	1B14212-27A	RES CMF 1/10W 5% 2.7K
R1430	176648	2819434-707	RES CF 1/4W 2% 2.7K
R1431	162006	93697-411	RES CMF 1/8W 5% 3.9K
R1432	829010	993272-349 *	RES CFFP 1/4W 5% 10R
R1433	197903	1B14212-18A	RES CMF 1/10W 5% 1.8K
R1434	176818	93697-373	RES CMF 1/8W 5% 100R
R2301	175325	2819434-373 *	RES CF 1/4W 5% 100R
R2302	181482	93697-701	RES CMF 1/8W 2% 1.5K
R2303	178284	93697-687	RES CMF 1/8W 2% 390R
R2304	175741	93697-349	RES CMF 1/8W 5% 10R
R2305	159061	93697-369	RES CMF 1/8W 5% 68R
R2306	176818	93697-373	RES CMF 1/8W 5% 100R
R2307	181493	93697-692	RES CMF 1/8W 2% 620R
R2308	176367	93697-365	RES CMF 1/8W 5% 47R
R2309	178299	93697-415	RES CMF 1/8W 5% 5.6K
R2310	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R2311	181107	2821716-103	RES CONTROL RF AGC
R2312	193061	93697-431	RES CMF 1/8W 5% 27K
R2313	174355	93697-441	RES CMF 1/8W 5% 68K
R2314	174359	93697-451	RES CMF 1/8W 5% 180K
R2315	192082	1B14212-15A	RES CMF 1/10W 5% 1.5K
R2317	205336	1B14211-30A	RES CMF 1/10W 5% 300R
R2318	200177	1B14211-27A	RES CMF 1/10W 5% 270R CTC169BL (SEE NOTE@)
R2318	194914	1B14211-33A	RES CMF 1/10W 5% 330R CTC169BM,BN,HM,HN
R2319	179955	2819434-435	RES CF 1/4W 5% 39K
R2320	181486	93697-673	RES CMF 1/8W 2% 100R
R2321	175321	2819434-404	RES CF 1/4W 5% 2K
R2322	218508	XX70434-200	RES CMF 1/10W 5% 100R
R2323	200172	993272-327 *	RES CF 1/4W 5% 1.2R
R2324	175045	2819434-385	RES CF 1/4W 5% 330R
R2325	195935	1B14210-82A	RES CMF 1/8W 5% 82R
R2326	205346	1B14212-56A	RES CMF 1/10W 5% 5.6K
R2601	197619	1B14210-75A	RES CMF 1/10W 5% 75R (SEE NOTE@)
R2601	192086	1B14211-15A	RES CMF 1/10W 5% 150R (SEE NOTE@)
R2602	174347	93697-390	RES CMF 1/8W 5% 510R (SEE NOTE@)
R2602	190460	93697-682	RES CMF 1/8W 2% 240R (SEE NOTE@)
R2603	181106	2821716-102	RES CONTROL NOTCH DEPTH
R2604	181482	93697-701	RES CMF 1/8W 2% 1.5K (SEE NOTE@)
R2604	190463	93697-699	REC CMF 1/8W 2% 1.2K (SEE NOTE@)
R2605	175045	2819434-385	RES CF 1/4W 5% 330R (SEE NOTE@)
R2605	175354	2819434-384	RES CF 1/4W 5% 300R (SEE NOTE@)
R2606	162003	93697-393	RES CMF 1/8W 5% 680R (SEE NOTE@)
R2606	182823	93697-400	RES CMF 1/8W 5% 1.3K (SEE NOTE@)
R2607	200173	93697-388	RES CMF 1/8W 5% 430R (SEE NOTE@)
R2607	176368	93697-394	RES CMF 1/8W 5% 750R (SEE NOTE@)
R2608	829010	993272-349	RES CFFP 1/4W 5% 10R
R2609	192098	1B14210-47A	RES CMF 1/10W 5% 47R (SEE NOTE@)
R2609	218508	XX70434-200	RES CMF 1/10W 5% 100R (SEE NOTE@)
R2701	218508	XX70434-200	RES CMF 1/10W 5% 100R
R2702	176979	2819434-382	RES CF 1/4W 5% 240R
R2703	174350	93697-413	RES CMF 1/8W 5% 4.7K
R2704	181071	93697-406	RES CMF 1/8W 5% 2.4K
R2705	175055	2819434-397	RES CF 1/4W 5% 1K
R2706	174364	93697-721	RES CMF 1/8W 2% 10K
R2707	200174	1B14214-20A	RES CMF 1/10W 5% 200K
R2708	175311	2819434-402	RES CF 1/4W 5% 1.6K (SEE NOTE@)
R2708	175367	2819434-701	RES CF 1/4W 5% 1.5K (SEE NOTE@)
R2709	181052	93697-408	RES CMF 1/8W 5% 3K (SEE NOTE@)
R2709	174349	93697-407	RES CMF 1/8W 5% 2.7K (SEE NOTE@)
R2710	174344	93697-383	RES CMF 1/8W 5% 270R
R2711	190461	93697-688	RES CMF 1/8W 2% 430R CTC169BL,HN,HM
R2711	162003	93697-393	RES CMF 1/8W 5% 680R CTC169BM (SEE NOTE@)
R2711	200173	93697-388	RES CMF 1/8W 5% 430R CTC169BM,BN (SEE NOTE@)
R2712	174365	93697-423	RES CMF 1/8W 5% 12K (SEE NOTE@)
R2712	178299	93697-415	RES CMF 1/8W 5% 5.6K (SEE NOTE@)
R2713	205291	XX11064-950	RES CMF 1/8W 2% 910R
R2714	176816	93697-445	RES CMF 1/8W 5% 100K
R2715	181055	93697-384	RES CMF 1/8W 5% 300R
R2716	190462	93697-697	RES CMF 1/8W 2% 1K
R2718	175890	2819434-411	RES CF 1/4W 5% 3.9K
R2719	157214	990401-416	RES MF 1/4W 1% 14.3K
R2720	175055	2819434-397	RES CF 1/4W 5% 1K
R2721	206037	993153-193 *	RES CC 1/2W 5% 27K
R2722	192081	1B14212-27A	RES CMF 1/10W 5% 2.7K
R2723	176648	2819434-407	RES CF 1/4W 5% 2.7K
R2724	175317	2819434-421	RES CF 1/4W 5% 10K
R2725	197637	1B14211-68A	RES CMF 1/10W 5% 680R
R2726	197644	1B14211-82A	RES CMF 1/10W 5% 820R
R2727	176816	93697-445	RES CMF 1/8W 5% 100K
R2729	178281	93697-417	RES CMF 1/8W 5% 6.8K
R2730	181109	2821716-202	RES CONTROL CONT PRESET
R2731	181071	93697-406	RES CMF 1/8W 5% 2.4K
R2732	181482	93697-701	RES CMF 1/8W 2% 1.5K
R2733	174344	93697-383	RES CMF 1/8W 5% 270R
R2734	157993	93697-690	RES CMF 1/8W 2% 510R CTC169BL
R2734	182628	93697-689	RES CMF 1/8W 2% 470R CTC169BM (SEE NOTE@)

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R2734	202014	93697-686	RES CMF 1/8W 2% 360R CTC169BM,BN,HM,HN (SEE NOTE@)
R2736	200441	93697-677	RES CMF 1/8W 2% 150R CTC169BL
R2736	181161	93697-005	RES CMF 1/8W 5% .05R CTC169BM,BN,HM,HN
R2739	175325	2819434-373	RES CF 1/4W 5% 100R
R2740	182822	93697-691	RES CMF 1/8W 2% 560R
R2741	197642	1B14212-30A	RES CMF 1/10W 5% 3K (SEE NOTE@)
R2741	192082	1B14212-15A	RES CMF 1/10W 5% 1.5K (SEE NOTE@)
R2742	181482	93697-701	RES CMF 1/8W 2% 1.5K
R2801	190462	93697-697	RES CMF 1/8W 2% 1K
R2802	177366	2821716-303	RES CONTROL CHR FIL
R2803	174368	93697-432	RES CMF 1/8W 5% 30K
R2804	180816	93697-747	RES CMF 1/8W 2% 120K
R2805	181080	93697-409	RES CMF 1/8W 5% 3.3K
R2806	174363	93697-479	RES CMF 1/8W 5% 2.7M
R2809	181051	93697-402	RES CMF 1/8W 5% 1.6K
R2810	181051	93697-402	RES CMF 1/8W 5% 1.6K
R2811	181051	93697-402	RES CMF 1/8W 5% 1.6K
R2812	174366	93697-427	RES CMF 1/8W 5% 18K
R2813	174367	93697-729	RES CMF 1/8W 2% 22K
R2814	200176	1B14203-30A	RES CMF 1/10W 2% 30K
R2815	174360	93697-454	RES CMF 1/8W 5% 240K
R2816	181107	2821716-103	RES CONTROL TINT PRESET
R2817	200177	1B14211-27A	RES CMF 1/10W 5% 270R
R2901	190462	93697-697	RES CMF 1/8W 2% 1K
R2902	190462	93697-697	RES CMF 1/8W 2% 1K
R2903	190462	93697-697	RES CMF 1/8W 2% 1K
R2908	175308	2819434-399	RES CF 1/4W 5% 1.2K
R2910	181492	93697-681	RES CMF 1/8W 2% 220R
R2911	176366	93697-405	RES CMF 1/8W 5% 2.2K
R2912	180325	93697-428	RES CMF 1/8W 5% 20K
R2913	190533	2821761-452	RES CONTROL RED BIAS
R2914	181492	93697-681	RES CMF 1/8W 2% 220R
R2915	176366	93697-405	RES CMF 1/8W 5% 2.2K (SEE NOTE@)
R2915	192096	1B14212-22A	RES CMF 1/10W 5% 2.2K (SEE NOTE@)
R2916	180325	93697-428	RES CMF 1/8W 5% 20K
R2917	190533	2821761-452	RES CONTROL BLU BIAS
R2918	181492	93697-681	RES CMF 1/8W 2% 220R
R2919	176366	93697-405	RES CMF 1/8W 5% 2.2K
R2920	180325	93697-428	RES CMF 1/8W 5% 20K
R2921	190533	2821761-452	RES CONTROL GRN BIAS
R2922	181492	93697-681	RES CMF 1/8W 2% 220R
R2923	181491	93697-379	RES CMF 1/8W 5% 180R
R2924	829010	727832-111	* RES CC 1/4W 5% 10R
R2925	181486	93697-673	RES CMF 1/8W 2% 100R
R2926	190531	2821761-101	RES CONTROL RED/BLU DR
R2927	829027	2819434-359	RES CF 1/4W 5% 27R
R2928	190531	2821761-101	RES CONTROL GRN DRIVE
R2929	158491	93697-361	RES CMF 1/8W 5% 33R
R2930	176629	2819434-391	RES CF 1/4W 5% 560R
R2935	181488	93697-685	RES CMF 1/8W 2% 330R
R2938	178280	93697-680	RES CMF 1/8W 2% 200R
R2941	175318	2819434-367	RES CF 1/4W 5% 56R
R2942	182628	93697-689	RES CMF 1/8W 2% 470R
R2943	182628	93697-689	RES CMF 1/8W 2% 470R
R2944	176814	93697-395	RES CMF 1/8W 5% 820R
R2945	178280	93697-680	RES CMF 1/8W 2% 200R
R2946	190462	93697-697	RES CMF 1/8W 2% 1K
R2947	829110	993272-373	RES CFFP 1/4W 5% 100R
R2948	200186	2819434-349	RES CF 1/4W 5% 10R
R2949	174345	93697-387	RES CMF 1/8W 5% 390R
R3101	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3102	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3103	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R3104	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3105	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R3106	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3107	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3108	174361	93697-469	RES CMF 1/8W 5% 1M
R3109	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3110	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3111	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3112	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3113	174350	93697-413	RES CMF 1/8W 5% 4.7K
R3114	205349	1B14212-82A	RES CMF 1/10W 5% 8.2K
R3115	174364	93697-721	RES CMF 1/8W 2% 10K
R3116	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3117	174364	93697-721	RES CMF 1/8W 2% 10K
R3118	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3119	175312	2819434-393	RES CF 1/4W 5% 680R
R3120	182822	93697-691	RES CMF 1/8W 2% 560R
R3121	174364	93697-721	RES CMF 1/8W 2% 10K
R3122	192070	1B14213-22A	RES CMF 1/10W 5% 22K
R3123	175055	2819434-397	RES CF 1/4W 5% 1K
R3125	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3126	192097	1B14212-47A	RES CMF 1/10W 5% 4.7K
R3128	197472	1B14211-56A	RES CMF 1/10W 5% 560R
R3129	197644	1B14211-82A	RES CMF 1/10W 5% 820R
R3130	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3131	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R3132	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R3135	176816	93697-445	RES CMF 1/8W 5% 100K
R3136	174364	93697-721	RES CMF 1/8W 2% 10K
R3138	174367	93697-729	RES CMF 1/8W 2% 22K
R3139	175055	2819434-397	RES CF 1/4W 5% 1K
R3140	175055	2819434-397	RES CF 1/4W 5% 1K
R3141	174348	93697-397	RES CMF 1/8W 5% 1K
R3142	176816	93697-445	RES CMF 1/8W 5% 100K
R3143	190462	93697-697	RES CMF 1/8W 2% 1K
R3201	218508	XX70434-200	RES CMF 1/10W 5% 100R
R3301	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3302	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3303	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3304	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3305	162006	93697-411	RES CMF 1/8W 5% 3.9K (SEE NOTE@)
R3305	174364	93697-721	RES CMF 1/8W 2% 10K (SEE NOTE@)
R3306	195937	1B14213-10A	RES CMF 1/10W 5% 10K (SEE NOTE@)
R3306	197633	1B14213-47A	RES CMF 1/10W 5% 47K (SEE NOTE@)
R3307	250059	1B14213-30A	RES CMF 1/10W 5% 30K
R3308	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3309	200178	93697-718	RES CMF 1/8W 2% 7.5K
R3310	175040	2819434-365	* RES CF 1/4W 5% 47R
R3312	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3313	192097	1B14212-47A	RES CMF 1/10W 5% 4.7K
R3314	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3317	175317	2819434-421	RES CF 1/4W 5% 10K (SEE NOTE@)
R3317	175322	2819434-437	RES CF 1/4W 5% 47K (SEE NOTE@)
R3318	192091	1B14212-20A	RES CMF 1/10W 5% 2K
R3319	175046	2819434-432	RES CF 1/4W 5% 330R
R3320	192091	1B14212-20A	RES CMF 1/10W 5% 2K
R3321	179316	2819434-416	RES CF 1/4W 5% 6.2K
R3324	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3325	192097	1B14212-47A	RES CMF 1/10W 5% 4.7K
R3326	174350	93697-413	RES CMF 1/8W 5% 4.7K
R3327	174363	93697-479	RES CMF 1/8W 5% 2.7M
R3329	175055	2819434-397	RES CF 1/4W 5% 1K
R3330	175360	2819434-425	RES CF 1/4W 5% 15K
R3331	180369	93697-404	RES CMF 1/8W 5% 2K
R3332	192091	1B14212-20A	RES CMF 1/10W 5% 2K
R3333	193886	2819434-436	RES CF 1/4W 5% 43K
R3334	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R3335	200179	1B14202-68A	RES CMF 1/10W 2% 3K (SEE NOTE@)
R3335	205356	1B14203-18A	RES CMF 1/10W 2% 18K (SEE NOTE@)
R3336	175047	2819434-415	RES CF 1/4W 5% 5.6K (SEE NOTE@)
R3336	175413	2819434-413	RES CF 1/4W 5% 4.7K (SEE NOTE@)
R3338	175306	2819434-441	RES CF 1/4W 5% 68K (SEE NOTE@)
R3338	175046	2819434-432	RES CF 1/4W 5% 330R (SEE NOTE@)
R3339	175055	2819434-397	RES CF 1/4W 5% 1K
R3340	197643	1B14212-91A	RES CMF 1/10W 5% 9.1K
R3341	162005	93697-442	RES CMF 1/8W 5% 75K
R3342	200180	1B14203-91A	RES CMF 1/10W 2% 91K
R3343	178285	93697-724	RES CMF 1/8W 2% 13K
R3344	174365	93697-423	RES CMF 1/8W 5% 12K
R3345	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3346	200181	2821716-152	RES CONTROL SUB-BRITE

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R3347	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3348	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3349	175055	2819434-397	RES CF 1/4W 5% 1K
R3351	181062	93697-438	RES CMF 1/8W 5% 51K
R3352	175317	2819434-421	RES CF 1/4W 5% 10K
R3353	176648	2819434-407	RES CF 1/4W 5% 2.7K
R3601	175317	2819434-421	RES CF 1/4W 5% 10K
R3602	174364	93697-721	RES CMF 1/8W 2% 10K
R3603	181491	93697-379	RES CMF 1/8W 5% 180R
R3604	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3605	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R4001	200444	1B08739-18A	RES WW 15W 10% 1.8R
R4002	183127	2817488-003	* RES CF 1/2W 5% 2.7M
R4003	200182	2874125-433	RES MF 2W 5% 33K
R4101	175054	2819434-429	RES CF 1/4W 5% 22K
R4102	175417	2819434-714	RES CF 1/4W 2% 5.1K (SEE NOTE@)
R4102	175413	2819434-713	RES CF 1/4W 2% 4.7K (SEE NOTE@)
R4103	175315	2819434-438	* RES CF 1/4W 5% 51K
R4104	175311	2819434-702	RES CF 1/4W 2% 1.6K (SEE NOTE@)
R4104	175367	2819434-701	RES CF 1/4W 2% 1.5K (SEE NOTE@)
R4105	179238	2819434-442	RES CF 1/4W 5% 75K
R4107	175374	2819435-357	RES CF 1/2W 5% 22R
R4108	203097	2819434-696	RES CF 1/4W 2% 910R
R4109	203745	2819434-700	RES CF 1/4W 2% 1.3K
R4110	200183	1B08228-18A	* RES WW 2W 5% .18R
R4113	190525	2821716-301	RES CONTROL STBY ADJ
R4114	176506	990401-464	RES MF 1/4W 1% 45.3K
R4115	200184	990401-350	RES MF 1/4W 1% 3240R
R4116			* RES CONTROL PART OF CR4111 B+ REG KIT
R4117	175040	2819434-365	RES CF 1/4W 5% 47R
R4119	200185	1B08521-33A	* RES WW 7W 5% 330R
R4120	200186	2819434-649	RES CF 1/4W 2% 10R
R4125	176796	2819435-373	RES CF 1/2W 5% 100R
R4126	200188	2874126-347	* RES MF 3W 5% 8.2R (SEE NOTE@)
R4126	206016	1B08329-68A	* RES WW 3W 5% 6.8R (SEE NOTE@)
R4127	175367	2819434-401	RES CF 1/4W 5% 1.5K
R4128	177535	2819434-387	RES CF 1/4W 5% 390R
R4129	180369	93697-404	RES CMF 1/8W 5% 2K
R4135	175317	2819434-421	RES CF 1/4W 5% 10K
R4136	175308	2819434-399	RES CF 1/4W 5% 1.2K
R4137	175055	2819434-397	RES CF 1/4W 5% 1K
R4139	174364	93697-721	RES CMF 1/8W 2% 10K
R4140	181494	93697-443	RES CMF 1/8W 5% 82K
R4142	175042	2819434-405	RES CF 1/4W 5% 2.2K
R4143	175042	2819434-405	RES CF 1/4W 5% 2.2K
R4144	175373	2819435-403	RES CF 1/2W 5% 1.8K
R4145	174364	93697-721	RES CMF 1/8W 2% 10K
R4146	174350	93697-413	RES CMF 1/8W 5% 4.7K
R4147	179259	2874124-429	RES MFFP 1W 5% 22K
R4148	200189	990401-471	RES MF 1/4W 1% 53.6K
R4149	831A12	2874124-327	* RES MFFP 1W 5% 1.2R
R4150	174340	93697-357	RES CMF 1/8W 5% 22R
R4151	176814	93697-395	RES CMF 1/8W 5% 820R
R4152	182628	93697-689	RES CMF 1/8W 2% 470R
R4302	181496	93697-416	RES CMF 1/8W 5% 6.2K
R4303	194914	1B14211-33A	RES CMF 1/10W 5% 330R
R4306	200199	2821761-202	RES CONTROL CENTERING CTC169BL,BM,BN
R4306	190533	2821761-452	RES CONTROL CENTERING CTC169HM,HN
R4307	175416	2819434-434	RES CF 1/4W 5% 36K (SEE NOTE@)
R4307	175046	2819434-732	RES CF 1/4W 2% 330R (SEE NOTE@)
R4307	180469	2819434-427	RES CF 1/4W 5% 18K (SEE NOTE@)
R4308	181485	93697-375	RES CMF 1/8W 2% 120R
R4309	175325	2819434-373	RES CF 1/4W 5% 100R
R4310	179798	2819435-395	RES CF 1/2W 5% 820R
R4311	175363	2819434-680	RES CF 1/4W 2% 200R
R4312	175040	2819434-365	* RES CF 1/4W 5% 47R
R4313	176673	2874124-373	RES MFFP 1W 5% 100R (SEE NOTE@)
R4313	176796	2819435-373	RES CF 1/2W 5% 100R (SEE NOTE@)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R4314	200192	2819435-363	* RES CF 1/2W 5% 39R
R4315	191146	2819435-419	RES CF 1/2W 5% 8.2K
R4317	177535	2819434-387	RES CF 1/4W 5% 390R
R4318	181491	93697-379	RES CMF 1/8W 5% 180R
R4319	175325	2819434-373	RES CF 1/4W 5% 100R
R4320	192100	1B14212-10A	RES CMF 1/10W 5% 1K CTC169BL,BM,BN
R4320	197472	1B14211-56A	RES CMF 1/10W 5% 560R CTC169HM,HN
R4321	175044	2819434-445	RES CF 1/4W 5% 100K
R4322	218508	XX70434-200	RES CMF 1/10W 5% 100R
R4323	175363	2819434-680	RES CF 1/4W 2% 200R
R4324	175418	93697-714	RES CMF 1/8W 2% 5.1K
R4326	195938	1B14202-33A	RES CMF 1/10W 2% 330R
R4327	175360	2819434-725	RES CF 1/4W 2% 15K
R4328	175418	93697-714	RES CMF 1/8W 2% 5.1K
R4401	176651	2819435-381	* RES CF 1/2W 5% 220R
R4402	181098	2819435-349	* RES CF 1/2W 5% 10R
R4404	175364	2819435-393	RES CF 1/2W 5% 680R
R4406	175364	2819435-393	RES CF 1/2W 5% 680R
R4407	175351	2819434-428	RES CF 1/4W 5% 20K (SEE NOTE@)
R4407	175413	2819434-414	RES CF 1/4W 5% 4.7K (SEE NOTE@)
R4408	175054	2819434-429	RES CF 1/4W 5% 22K (SEE NOTE@)
R4408	175417	2819434-414	RES CF 1/4W 5% 5.1K (SEE NOTE@)
R4409	175413	2819434-413	RES CF 1/4W 5% 4.7K (SEE NOTE@)
R4409	175042	2819434-405	RES CF 1/4W 5% 2.2K (SEE NOTE@)
R4501	175047	2819434-415	RES CF 1/4W 5% 5.6K
R4503	178299	93697-415	RES CMF 1/8W 5% 5.6K
R4504	175312	2819434-393	RES CF 1/4W 5% 680R
R4505	200445	993291-330	RES MF 1/2W 5% 1.6R
R4506	200194	2819435-390	RES CF 1/2W 5% 510R
R4507	177816	2819434-459	RES CF 1/4W 5% 390K
R4508	179955	2819434-435	RES CF 1/4W 5% 39K
R4509	174364	93697-721	RES CMF 1/8W 2% 10K
R4510	174364	93697-721	RES CMF 1/8W 2% 10K
R4511	181065	93697-719	RES CMF 1/8W 2% 8.2K
R4512	181484	93697-403	RES CMF 1/8W 5% 1.8K
R4513	181485	93697-375	RES CMF 1/8W 2% 120R
R4514	181062	93697-438	RES CMF 1/8W 5% 51K
R4515	205346	1B14212-56A	RES CMF 1/10W 5% 5.6K
R4516	175306	2819434-441	RES CF 1/4W 5% 68K
R4517	175055	2819434-397	RES CF 1/4W 5% 1K
R4518	175412	2819434-389	* RES CF 1/4W 5% 470R
R4519	176793	2819435-389	RES CF 1/2W 5% 470R
R4520	179248	2819435-417	* RES CF 1/2W 5% 6.8K
R4521	181060	93697-426	RES CMF 1/8W 5% 16K
R4522	200417	2821761-153	RES CONTROL VERT HEIGHT
R4523	200446	2874124-408	* RES MF 1W 5% 3K
R4524	197633	1B14213-47A	RES CMF 1/10W 5% 47K
R4525	174366	93697-427	RES CMF 1/8W 5% 18K
R4526	181073	93697-418	RES CMF 1/8W 5% 7.5K
R4539	181494	93697-443	RES CMF 1/8W 5% 82K
R4542	175417	2819434-414	RES CF 1/4W 5% 5.1K
R4543	181075	93697-461	RES CMF 1/8W 5% 470K
R4544	200197	993272-341	* RES CFFP 1/4W 5% 4.7R
R4545	181490	93697-753	RES CMF 1/8W 2% 220K
R4546	174355	93697-441	RES CMF 1/8W 5% 68K
R4547	192084	XX50886-630	RES CMF 1/10W 5% 100K
R4548	224267	2819435-401	RES CF 1/2W 5% 1.5K
R4602	175312	2819434-393	RES CF 1/4W 5% 680R
R4604	176457	2819434-469	RES CF 1/4W 5% 1M
R4701	830010	993273-349	* RES CFFP 1/2W 5% 10R
R4703	195730	1B08329-33A	* RES WW 3W 5% 3.3R
R4705	176647	2819434-392	RES CF 1/4W 5% 620R
R4710	829012	993272-351	* RES CF 1/4W 2% 12R
R4711	175354	2819434-384	RES CF 1/4W 5% 300R
R4712	175314	2819434-433	RES CF 1/4W 5% 33K
R4713	200198	2819435-441	* RES CF 1/2W 5% 68K (SEE NOTE@)
R4713	830368	993114-569	* RES CF 1/2W 2% 68K (SEE NOTE@)
R4714	175325	2819434-373	RES CF 1/4W 5% 100R
R4715	175363	2819434-680	RES CF 1/4W 2% 200R
R4716	175312	2819434-693	RES CF 1/4W 2% 680R
R4717	175318	2819434-667	RES CF 1/4W 2% 56R
R4718	181486	93697-673	RES CMF 1/8W 2% 100R

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R4719	176793	2819435-389	* RES CF 1/2W 5% 470R
R4720	830010	993273-349	* RES CFFP 1/2W 5% 10R
R4802	200199	2821761-202	RES CONTROL WIDTH
R4803	176816	93697-445	RES CMF 1/8W 5% 100K
R4804	174355	93697-441	RES CMF 1/8W 5% 68K
R4805	181107	2821716-103	RES CONTROL E/W PIN AMP
R4806	176648	2819434-407	RES CF 1/4W 5% 2.7K
R4807	179955	2819434-435	RES CF 1/4W 5% 39K
R4808	181484	93697-403	RES CMF 1/8W 5% 1.8K
R4809	175769	2819435-387	* RES CF 1/2W 5% 390R
R4810	177535	2819434-387	RES CF 1/4W 5% 390R
R4812	181073	93697-418	RES CMF 1/8W 5% 7.5K
R4813	180325	93697-428	RES CMF 1/8W 5% 20K
R4814	180369	93697-404	RES CMF 1/8W 5% 2K
R4815	178299	93697-415	RES CMF 1/8W 5% 5.6K
R4817	176668	2819434-461	RES CF 1/4W 5% 470K
R4818	200200	2874124-406	RES MF 1W 5% 2.4K
R4819	179238	2819434-442	RES CF 1/4W 5% 75K
R4821	175784	2874124-377	* RES MFFP 1W 5% 150R
R4822	197474	1B14213-15A	RES CMF 1/10W 5% 15K
R4822	205354	1B14203-15A	RES CMF 1/10W 2% 15K
R4823	205408	1B14229-00A	RES CMF 1/10W .0R
R4824	192084	1B14214-10A	RES CMF 1/10W 5% 100K (SEE NOTE@)
R4824	205376	1B14204-30A	RES CMF 1/10W 2% 300K (SEE NOTE@)
R4825	197471	1B14213-68A	RES CMF 1/10W 5% 68K
R4826	192097	XX30944-310	RES CMF 1/10W 5% 4.7K
R4901	175317	2819434-421	* RES CF 1/4W 5% 10K
R4902	175325	2819434-373	* RES CF 1/4W 5% 100R
R4903	204794	990401-465	* RES MF 1/4W 1% 46.4K
R4904	190469	990401-458	RES MF 1/4W 1% 39.2K
R4905	175054	2819434-729	RES CF 1/4W 2% 22K
R4920	175417	2819434-714	RES CF 1/4W 2% 5.1K
R4922	197470	1B14213-20A	RES CMF 1/10W 5% 20K
RT4501	181161	93697-005	RES CMF 1/8W 5% .05R
SCR501	197591	1415780-009	SCR
SF2301	200203	1C40002-01A	FILTER ACOUSTIC WAVE
T4101	200204	1C67101-01A	* TRANSFORMER ISO DRIVER
T4102	201625	1C61106-03D	* TRANSFORMER SMT
T4301	206394	2G32005-501	* TRANSFORMER HORIZ DR/VERT
T4401	200450	2G25018-502	* TRANSFORMER IHVT W/ SHRINK TUBING (FOR CHASSIS W/SLOT UNDER MTG AREA)
T4401	232191	2G25018-A3A	* TRANSFORMER IHVT (FOR CHASSIS W/NO SLOT UNDER MTG AREA)
U1001	200137	1A51125-01A	* IC SIGNAL DEFL/PROCESS
U1401	161079	1421826-001	IC AUDIO SWITCHING
U2601	179729	1421886-001	IC ANALOG COMB
U3101	200208	1A66107-02F	IC DIG MICROPROCESSOR CTC169BL,BM,BN
U3101	206396	1A66107-34C	IC DIG MICROPROCESSOR CTC169HM
U3101	206395	1A66107-03C	IC DIG MICROPROCESSOR CTC169HN
U3200	204265	1A64105-05A	IC EEPROM CTC169BL,BN
U3200	204264	1A64105-01A	IC EEPROM CTC169BM
U3200	207124	1A64105-10A	IC EEPROM CTC169HM
U3200	207770	1A64105-13A	IC EEPROM CTC169HN
U4101	200419	1A51117-01A	* IC REGULATOR CONTROL
U4501	200420	1A51123-01A	IC VERTICAL SWITCH
U4801	200420	1A51123-01A	IC PINCUSHION
Y2801	161235	2816766-002	CRYSTAL 3.58MHZ
Y3101	182839	2816766-004	CRYSTAL 8MHZ
Y4301	200210	XX11004-909	RESONATOR
	180857	1448216-003	BEAD, CERAMIC
	202018	6R04012-03B	* BRACKET, SUPPORT BIAS DRIVE
	181138	2862928-001	CLIP, FOR Q4101 (SMALL)
	181032	2862928-002	CLIP, FOR Q4101 (LARGE)
	200216	8R10006-01C	* HOUSING, FOCUS
	250045	6R23005-01A	* LENS, LED/LDR

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	135255	59149-106	NUT, CONTROL MTG
	203754	6R16010-01B	* OVERLAY, JACK PANEL RF SWITCH
	203772	6R16011-01A	* OVERLAY, JACK PANEL TUNER
	204808	6R16012-01B	* OVERLAY, JACK PANEL SVHS
	204807	8R14007-01G	* PANEL, JACK
	139301	1479290-001	RETAINER, BEAD CHAIN
	154382	1449749-017	SUPPORT, FOR DNR PCB
	204822	1449749-028	SUPPORT, FOR HV REG PCB
	154385	2870929-003	WIRE TIE, TWIST END

CHASSIS FAMILY 2

CTC169BT CTC169PU
CTC169BU CTC169PV
CTC169BW CTC169PW
CTC169PT CTC169PX

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
C1201	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C1203	190499	1C30179-47A	CAP LYTC 4.7UF M 100V
C1204	174402	2861142-33A	CAPCC 10PF F NPO 50V
C1401	208429	XX43329-660	CAP LYTC 47UF M 16V
C1402	208429	XX43329-660	CAP LYTC 47UF M 16V
C1403	193043	1C30230-47A	CAP LYTC 47UF M 25V
C1404	193043	1C30230-47A	CAP LYTC 47UF M 25V
C1405	189978	1C30121-22A	CAP LYTC 220UF M 16V
C1406	181090	2861143-14A	CAPCC 39PF J NPO 50V
C1407	181091	2861143-84A	CAPCC 150PF J NPO 50V CTC169PT,PU,PV,PW,PX
C1407	174414	2861143-74A	CAPCC 120PF J NPO 50V CTC169BT,BU,BW
C1408	216802	XX20438-725	CAP LYTC 10UF M 16V
C1409	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C1410	210893	1C18571-47A	CAPCC 470PF K X7R 50V
C1411	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C1412	189981	1C30150-10A	CAP LYTC 10UF M 50V
C2301	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C2302	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C2303	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C2304	160077	1C30178-47A	CAP LYTC .47UF M 100V
C2305	190551	2861146-75Z	CAPCC .022UF K X7R 50V
C2306	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C2307	190499	1C30179-47A	CAP LYTC 4.7UF M 100V
C2308	190543	2861143-94A	CAPCC 180PF J NPO 50V
C2309	174403	2861142-44A	CAPCC 12PF J NPO 50V
C2310	194440	1C18500-18A	CAPCC 18PF K NPO 50V
C2311	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C2312	174401	2861141-92A	CAPCC 7PF D NPO 50V
C2313	190500	1C31121-18A	CAP LYTC 180UF M 16V
C2314	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C2315	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C2316	200139	2861144-64A	CAPCC 560PF J NPO 50V
C2317	200140	1C18793-10A	CAPCC .01UF Z Z5U 50V (SEE NOTE@)
C2317	174423	2861146-35Z	CAPCC .01UF K X7R 50V (SEE NOTE@)
C2601	143879	2841253-92M	CAPCD 1000PF K Z5P 50V
C2602	174412	2861143-64A	CAPCC 100PF J NPO 50V (SEE NOTE@)
C2602	174408	2861142-94A	CAPCC 33PF J NPO 50V (SEE NOTE@)
C2603	181092	2843371-012	CAPCC 91PF J NPO 50V CTC169BT,BU,BW,
C2603	174412	2861143-64A	CAPCC 100PF J NPO 50V CTC169PT,PU,PV,PW,PX
C2604	174405	2861142-64A	CAPCC 18PF J NPO 50V (SEE NOTE@)
C2604	174406	2861142-74A	CAPCC 22PF J NPO 50V (SEE NOTE@)
C2604	174404	2861142-54A	CAPCC 15PF J NPO 50V (SEE NOTE@)
C2605	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C2606	192060	1C18562-10A	CAPCC 1000PF K SL 50V CTC169BT,BU,BW

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
C2606	197600	1C18572-10A	CAPCC 1000PF K X7R 50V CTC169PT,PU,PV,PW,PX
C2701	200141	2821714-224	CAP POLY .1UF K 63V
C2704	174404	2861142-54A	CAPCC 15PF J NPO 50V CTC169BT,BU,BW
C2704	174402	2861142-32A	CAPCC 10PF F NPO 50V CTC169PT,PU,PV,PW,PX
C2705	220998	1C30179-10A	CAP LYTC 1UF M 100V
C2706	220998	1C30179-10A	CAP LYTC 1UF M 100V
C2707	174412	2861143-64A	CAPCC 100PF J NPO 50V
C2708	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C2709	220998	1C30179-10A	CAP LYTC 1UF M 100V
C2710	176851	1C30120-33A	CAP LYTC 33UF M 16V
C2711	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C2712	189981	1C30150-10A	CAP LYTC 10UF M 50V
C2715	200436	1C30169-68A	CAP LYTC 6.8UF M 63V
C2717	190520	2821714-228	CAP POLY .22UF K 63V
C2718	174412	2861143-64A	CAPCC 100PF J NPO 50V
C2720	175120	1C30179-68A	CAP LYTC 6.8UF M 100V
C2723	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
C2724	193340	1C18401-10A	CAPCC 100PF J NPO 50V CTC169BT,BU,BW (SEE NOTE@)
C2724	193339	1C18400-68A	CAPCC 68PF J NPO 50V CTC169BT,BU,BW (SEE NOTE@)
C2724	193338	1C18501-18A	CAPCC 180PF J NPO 50V CTC169PT,PU,PV,PW,PX
C2801	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C2802	195691	1C30179-22A	CAP LYTC 2.2UF M 100V
C2803	190551	2861146-75Z	CAPCC .022UF K X7R 50V
C2804	174404	2861142-54A	CAPCC 15PF J NPO 50V
C2805	220998	1C30179-10A	CAP LYTC 1UF M 100V
C2806	151119	1C30179-33A	CAP LYTC 3.3UF M 100V
C2807	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C2808	200142	2861146-65Z	CAPCC .018UF K X7R 50V CTC169BT,BU,BW
C2808	210892	1C18573-18A	CAPCC .018PF K X7R 50V CTC169PT,PU,PV,PW,PX
C2809	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C2810	190500	1C31121-18A	CAP LYTC 180UF M 16V
C2811	174406	2861142-74A	CAPCC 22PF J NPO 50V
C2812	174406	2861142-74A	CAPCC 22PF J NPO 50V
C2813	174406	2861142-74A	CAPCC 22PF J NPO 50V
C2814	190542	2861143-34A	CAPCC 56PF J NPO 50V CTC169BT,BU,BW (SEE NOTE@)
C2814	176828	2861143-54A	CAPCC 82PF J NPO 50V CTC169BT,BU,BW (SEE NOTE@)
C2814	174410	2861143-44A	CAPCC 68PF J NPO 50V CTC169PT,PU,PV,PW,PX
C2815	192050	1C18500-27A	CAPCC 27PF K NPO 50V
C2905	174409	2861143-24A	CAPCC 47PF J NPO 50V
C2909	190542	2861143-34A	CAPCC 56PF J NPO 50V
C2910	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C2911	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C2918	193036	2861144-55Z	CAPCC 470PF K X7R 50V
C2919	193036	2861144-55Z	CAPCC 470PF K X7R 50V
C2920	200143	2861144-45Z	CAPCC 390PF K X7R 50V
C2927	175397	2861143-95A	CAPCC 180PF K NPO 50V
C2928	192060	1C18562-10A	CAPCC 1000PF K SL 50V CTC169BT,BU,BW
C2928	197600	1C18572-10A	CAPCC 1000PF K X7R 50V CTC169PT,PU,PV,PW,PX
C3101	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3102	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3103	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C3104	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3105	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3106	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3107	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3108	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3109	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3110	194903	1C18500-22A	CAPCC 22PF K NPO 50V
C3114	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3115	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C3116	200144	1C18572-68A	CAPCC 6800PF K X7R 50V
C3117	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3119	190542	2861143-34A	CAPCC 56PF J NPO 50V
C3120	190542	2861143-34A	CAPCC 56PF J NPO 50V
C3121	181460	2861144-95Z	CAPCC 1000PF K X7R 50V

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
C3123	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3124	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3125	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3126	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3127	192060	1C18562-10A	CAPCC 1000PF K SL 50V CTC169BT,BU,BW
C3127	197600	1C18572-10A	CAPCC 1000PF K X7R 50V CTC169PT,PU,PV,PW,PX
C3128	193034	2861144-65Z	CAPCC 560PF K X7R 50V CTC169BT,BU,BW
C3128	200139	2861144-64A	CAPCC 560PF J NPO 50V CTC169PT,PU,PV,PW,PX
C3129	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C3144	207876	1C18571-56A	CAPCC 560P K X7R 50V CTC169BT,BU,BW
C3144	202904	1C18501-56A	CAPCC 560PF K NPO 50V CTC169PT,PU,PV,PW,PX
C3145	193340	1C18501-10A	CAPCC 100PF K NPO 50V
C3201	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C3301	174412	2861143-64A	CAPCC 100PF J NPO 50V
C3302	174412	2861143-64A	CAPCC 100PF J NPO 50V
C3303	174412	2861143-64A	CAPCC 100PF J NPO 50V CTC169BT,BU,BW
C3303	193340	1C18401-10A	CAPCC 100PF J NPO 50V CTC169PT,PU,PV,PW,PX
C3304	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C3305	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3307	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3308	197600	1C18572-10A	CAPCC 1000PF K X7R 50V
C3309	197600	1C18572-10A	CAPCC 1000PF K X7R 50V
C3310	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
C3311	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3312	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3313	174423	2861146-35Z	CAPCC .01UF K X7R 50V CTC169BT,BU,BW
C3313	195689	1C18573-10A	CAPCC .01UF K X7R 50V CTC169PT,PU,PV,PW,PX
C3314	178188	2861144-14A	CAPCC 220PF J NPO 50V
C3315	174412	2861143-64A	CAPCC 100PF J NPO 50V
C3316	192052	1C18501-22A	CAPCC 220PF K NPO 50V (SEE NOTE@)
C3316	202904	1C18501-56A	CAPCC 560PF K NPO 50V (SEE NOTE@)
C3317	174404	2861142-54A	CAPCC 15PF J NPO 50V CTC169BT,BU,BW
C3317	202907	1C18400-15A	CAPCC 15PF J NPO 50V CTC169PT,PU,PV,PW,PX
C3318	174409	2861143-24A	CAPCC 47PF J NPO 50V
C3319	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3320	174409	2861143-24A	CAPCC 47PF J NPO 50V
C3321	174409	2861143-24A	CAPCC 47PF J NPO 50V
C3322	220998	1C30179-10A	CAP LYTC 1UF M 100V
C3323	192049	1C18400-82A	CAPCC 82PF J NPO 50V
C3602	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C3603	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C3604	190500	1C31121-18A	CAP LYTC 180UF M 16V
C3605	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C3606	200140	1C18793-10A	CAPCC .01UF Z Z5U 50V CTC169BT,BU,BW
C3606	195689	1C18573-10A	CAPCC .01UF K X7R 50V CTC169PT,PU,PV,PW,PX
C4002	190538	2821785-005	* CAPCD 680PF M Z5P 1KV
C4005	190538	2821785-005	* CAPCD 680PF M Z5P 1KV
C4006	250102	2870613-109	* CAP CAPRISTOR
C4007	190561	2875500-009	* CAP LYTC 820UF K 200V
C4008	195697	1C10106-21A	* CAPCD 5000PF M Z5V 120V
C4009	195749	2821785-002	CAPCD .012UF M Z5U 250V
C4101	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C4102	195691	1C30279-22A	CAP LYTC 2.2UF M 100V
C4103	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C4104	190499	1C30279-47A	CAP LYTC 4.7UF K 100V (SEE NOTE@)
C4104	189982	1C30250-15A	CAP LYTC 15UF M 50V (SEE NOTE@)
C4105	181099	2821714-330	CAP POLY .33UF J 50V
C4106	174421	2861145-45Z	CAPCC 2200PF K X7R 50V
C4107	143879	2841253-92M	CAPCD 1000PF K Z5P 50V
C4108	208002	1C31170-39A	CAP LYTC 39UF M 100V
C4109	200145	2841260-42M	CAPCD 1800PF K Z5P 250V
C4110	143242	1490360-006	* CAPCD 470PF J N1500 1.5KV
C4111	190538	2821785-005	CAPCD 680PF M Z5P 1KV

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
C4112	201619	1C20120-09A *	CAP POLY 5600PF J 800V
C4113	195699	2861146-85Z	CAPCC .027UF K X7R 50V
C4115	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C4116	174409	2861143-24A	CAPCD 47PF J NPO 50V (SEE NOTE@)
C4116	143867	2841252-23A	CAPCD 47PF J NPO 50V (SEE NOTE@)
C4116	149717	2841253-52M	CAPCD 470PF K Z5P 50V (SEE NOTE@)
C4118	190496	1C30241-47A	CAP LYTC 470UF M 35V
C4136	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C4138	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C4139	179277	2861147-25Z	CAPCC .047UF J X7R 50V
C4140	190538	2821785-005	CAPCD 680PF M Z5P 1KV
C4141	200147	2875500-10A *	CAP LYTC 470UF M 180V
C4142	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C4143	175119	1C30242-10A	CAP LYTC 1000UF M 35V
C4144	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C4145	175119	1C30142-10A	CAP LYTC 1000UF M 35V (85 DEG)(SEE NOTE@)
C4145	190721	1C31142-10A	CAP LYTC 1000UF M 35V (105 DEG)(SEE NOTE@)
C4146	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C4147	190497	1C30251-68A	CAP LYTC 680UF K 50V
C4148	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C4149	190497	1C30251-68A	CAP LYTC 680UF K 50V
C4150	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C4151	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C4152	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C4153	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
C4154	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C4155	210893	1C18451-47A	CAPCC 470PF J N750 50V
C4301	220998	1C30179-10A	CAP LYTC 1UF M 100V
C4302	195692	2861146-55Z	CAPCC .015UF K X7R 50V
C4303	190551	2861146-75Z	CAPCC .022UF K X7R 50V
C4304	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
C4305	190548	2861145-85Z	CAPCC 4700PF K X7R 50V
C4306	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C4307	175120	1C30179-68A	CAP LYTC 6.8UF M 100V
C4309	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C4310	200153	2821714-320	CAP POLY .047UF J 63V
C4311	190499	1C31159-47A	CAP LYTC 4.7UF M 50V
C4312	149727	2841254-32M	CAPCD 1800PF K Z5P 50V
C4313	200148	1C18672-47A	CAPCC 4700PF M X7R 50V
C4314	193036	2861144-55Z	CAPCC 470PF K X7R 50V
C4315	174403	2861142-44A	CAPCC 12PF J NPO 50V
C4316	210894	2841253-73J	CAPCD 680PF J SL 50V
C4401	206009	XX80408-465 *	CAP POLY .0162UF HP 1.6KV
C4402	200149	1C20120-06A *	CAP POLY .056UF J 400V
C4405	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C4406	143242	1490360-006 *	CAPCD 470PF J N1500 1.5KV
C4407	190534	2821785-001 *	CAPCD 4700PF K Z5P 250V
C4502	179623	2841261-12M	CAPCD 5600PF K Z5P 250V
C4503	200151	1490001-72A *	CAP LYTC 2200UF K 35V
C4504	160077	1C30178-47A	CAP LYTC .47UF M 100V
C4505	189982	1C30250-15A	CAP LYTC 15UF M 50V
C4511	200439	1C20110-46A *	CAP POLY .99UF J 250V
C4512	195691	1C30179-22A	CAP LYTC 2.2UF M 100V
C4518	181099	2821714-330	CAP POLY .33UF J 50V
C4519	181099	2821714-330	CAP POLY .33UF J 50V
C4520	151578	1C30240-33A	CAP LYTC 33UF M 35V
C4521	181230	2861146-26Z	CAPCC 8200PF K X7R 50V (SEE NOTE@)
C4521	205192	1C15199-01A	CAPCD 8200PF K X7R 50V (SEE NOTE@)
C4522	200153	2821714-320	CAP POLY .047UF J 63V
C4523	179277	2861147-25Z	CAPCC .047UF J X7R 50V
C4524	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C4525	160077	1C30178-47A	CAP LYTC .47UF M 100V
C4610	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C4611	189981	1C30150-10A	CAP LYTC 10UF M 50V
C4612	176302	1C30111-10A	CAP LYTC 100UF M 10V
C4701	146158	2821714-821	CAP POLY .056UF K 250V
C4702	190538	2821785-005	CAPCD 680PF M Z5P 1KV
C4703	190479	1490001-062	CAP LYTC 47UF M 250V
C4704	190538	2821785-005	CAPCD 680PF M Z5P 1KV
C4705	190497	1C30251-68A	CAP LYTC 680UF K 50V
C4706	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C4707	189981	1C30150-10A	CAP LYTC 10UF M 50V (SEE NOTE@)
C4707	179277	2861147-25Z	CAPCC .047UF J X7R 50V (SEE NOTE@)
C4711	193043	1C30130-47A	CAP LYTC 47UF M 25V
C4712	192846	1C30120-68A	CAP LYTC 68UF M 16V
C4713	190538	2821785-005	CAPCD 680PF M Z5P 1KV
C4714	194581	1C30131-10A	CAP LYTC 100UF M 25V
C4715	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C4801	196060	2841204-05A	CAP LYTC 10UF M 35V
C4802	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C4807	189981	1C30150-10A	CAP LYTC 10UF M 50V
C4808	192846	1C30120-68A	CAP LYTC 68UF M 16V
C4811	181460	2861144-95Z	CAPCC 1000PF K X7R 50V (SEE NOTE@)
C4811	174421	2861145-45Z	CAPCC 2200PF K X7R 50V (SEE NOTE@)
C4812	155050	2861144-95M	CAPCC 1000PF K SL 50V CTC169BT,BU,BW
C4812	181460	2861144-95Z	CAPCC 1000PF K X7R 50V CTC169PT,PU,PV,PW,PX
C4813	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C4814	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C4815	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C4816	204791	2821714-209	CAP POLY 5600PF K 63V
C4817	190520	2841258-92M	CAPCD 150PF K Z5P 250V
C4901	141722	2841258-92M	CAPCD 150PF K Z5P 250V
C4902	202011	2821714-324	CAP POLY .1UF J 63V
C4903	143879	2841253-92M	CAPCD 1000PF K Z5P 50V
C4905	220998	1C30179-10A *	CAP LYTC 1UF M 100V
C4906	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
CF1201	195702	1496278-005	FILTER CERAMIC
CF2301	181125	2821737-001	FILTER
CR1401	176746	99201-210	DIODE ZENER 5.6V .4W
CR1402	176746	99201-210	DIODE ZENER 5.6V .4W
CR1403	176746	99201-210	DIODE ZENER 5.6V .4W
CR1404	176746	99201-210	DIODE ZENER 5.6V .4W
CR1405	192848	99201-215	DIODE ZENER 9.1V .4W
CR1406	164874	1471872-010	DIODE
CR2701	164717	1471872-006	DIODE
CR2702	164717	1471872-006	DIODE
CR2703	164717	1471872-006	DIODE
CR2704	164717	1471872-006	DIODE
CR2705	164717	1471872-006	DIODE
CR2706	164717	1471872-006	DIODE
CR2802	164717	1471872-006	DIODE
CR2901	164717	1471872-006	DIODE
CR2903	164717	1471872-006	DIODE
CR2907	164717	1471872-006	DIODE
CR2908	164717	1471872-006	DIODE
CR3101	176746	99201-210	DIODE ZENER 5.6V .4W
CR3102	164717	1471872-006	DIODE
CR3103	164717	1471872-006	DIODE
CR3301	164717	1471872-006	DIODE
CR3302	164717	1471872-006	DIODE
CR3601	200155	99201-328	DIODE ZENER 33V .4W
CR4001	147015	2811925-002	DIODE
CR4002	147015	2811925-002	DIODE
CR4003	147015	2811925-002	DIODE
CR4004	147015	2811925-002	DIODE
CR4101	207878	2820546-002	DIODE
CR4102	164717	1471872-006	DIODE
CR4105	200156	2820546-005	DIODE (546-5) (SEE NOTE@)
CR4105	140971	1476171-033	DIODE (147) (SEE NOTE@)
CR4105	207878	XX60341-800	DIODE (1S1835) (SEE NOTE@)
CR4106	176296	1476171-031	DIODE
CR4111	202055	1F05008-25A *	DIODE B+ REG KIT
CR4112	164874	1471872-010	DIODE
CR4115	136634	99201-219	DIODE ZENER 13V .4W
CR4116	200157	2820545-007	DIODE
CR4117	176296	1476171-031 *	DIODE
CR4118	164590	2820545-002	DIODE
CR4119	164590	2820545-002	DIODE
CR4120	164590	2820545-002	DIODE
CR4121	136634	99201-219	DIODE ZENER 13V .4W
CR4122	200158	99202-103	DIODE ZENER 3V 1W
CR4123	176746	99201-210	DIODE ZENER 5.6V .4W
CR4302	164717	1471872-006	DIODE
CR4303	161871	99201-214	DIODE ZENER 8.2V .4W

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
CR4304	164717	1471872-006	DIODE
CR4305	164717	1471872-006	DIODE
CR4401	198596	XX44001-602	DIODE
CR4402	164589	2820545-005	DIODE
CR4403	139706	1471872-008	DIODE
CR4404	164717	1471872-006	DIODE
CR4501	164717	1471872-006	DIODE
CR4502	139706	1471872-008	DIODE
CR4503	129938	99201-211	DIODE ZENER 6.2V .4W
CR4504	164589	2820545-004	DIODE
CR4511	164717	1471872-006	DIODE
CR4512	192848	99201-215	DIODE ZENER 9.1V .4W
CR4513	164717	1471872-006	DIODE
CR4514	130044	99201-216	DIODE ZENER 10V .4W
CR4515	157301	1471872-024	DIODE
CR4516	164717	1471872-006	DIODE
CR4606	161081	99201-310	DIODE ZENER 5.6V .4W
CR4701	176296	1476171-031	DIODE
CR4702	153672	1476171-044	DIODE
CR4705	176296	1476171-031	DIODE
CR4709	196062	2820500-001	DIODE
CR4710	164717	1471872-006	DIODE (031)(SEE NOTE@)
CR4710	139706	1471872-008	DIODE (048)(SEE NOTE@)
CR4712	209741	99201-314	DIODE ZENER 8.2V .4W
CR4713	153672	1476171-044	DIODE
CR4803	176296	1476171-031	DIODE
CR4805	138974	99201-208	DIODE ZENER 4.7V .4W
CR4806	164717	1471872-006	DIODE
CR4901	157301	1471872-024	* DIODE
CR4902	159429	1497049-006	* DIODE ZENER 10V .2W
DL2601	193568	1C68110-01A	DELAY LINE
DL2701	195704	2821744-03A	DELAY LINE (SEE NOTE@)
DL2701	206397	2821744-05A	DELAY LINE (SEE NOTE@)
F4001	175425	2821524-118	* FUSE 5A 125V
FB4101	152102	2843117-001	BEAD
FB4102	152102	2843117-001	BEAD
FB4103	153328	2843165-004	BEAD
FB4301	152103	2843117-002	BEAD
FB4302	152103	2843117-002	BEAD
FB4401	204792	1Z02001-01A	COIL
FB4402	206390	2843117-012	BEAD
FL4001	207879	2G45002-522	* FILTER AC LINE
J1401	190514	1P21002-41A	JACK PHONO VID IN 1
J1402	190514	1P21002-41A	JACK PHONO VID IN 2
J1403	203741	1P21011-04A	JACK PHONO SEL VID OUT
J1404	195705	1P24004-01A	SOCKET SVHS
J3001	200160	XX10005-030	CONNECTOR 10 PIN FPA
J4901	190476	1466404-320	* CONNECTOR XRP TEST
JC111	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC112	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC302	181161	93697-005	RES CMF 1/8W 5% .05R
JC303	181161	93697-005	RES CMF 1/8W 5% .05R
JC304	181161	93697-005	RES CMF 1/8W 5% .05R
JC306	181161	93697-005	RES CMF 1/8W 5% .05R
JC402	181161	93697-005	RES CMF 1/8W 5% .05R
JC403	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC404	181161	93697-005	RES CMF 1/8W 5% .05R
JC405	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC406	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC407	181161	93697-005	RES CMF 1/8W 5% .05R
JC408	181161	93697-005	RES CMF 1/8W 5% .05R
JC409	181161	93697-005	RES CMF 1/8W 5% .05R
JC410	181161	93697-005	RES CMF 1/8W 5% .05R
JC411	181161	93697-005	RES CMF 1/8W 5% .05R
JC412	181161	93697-005	RES CMF 1/8W 5% .05R
JC413	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC414	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC415	181161	93697-005	RES CMF 1/8W 5% .05R
JC416	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC422	181161	93697-005	RES CMF 1/8W 5% .05R
JC425	181161	93697-005	RES CMF 1/8W 5% .05R
JC426	181161	93697-005	RES CMF 1/8W 5% .05R
JC427	181161	93697-005	RES CMF 1/8W 5% .05R
JC428	181161	93697-005	RES CMF 1/8W 5% .05R
JC429	181161	93697-005	RES CMF 1/8W 5% .05R
JC430	181161	93697-005	RES CMF 1/8W 5% .05R

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
JC431	181161	93697-005	RES CMF 1/8W 5% .05R
JC432	181161	93697-005	RES CMF 1/8W 5% .05R
JC445	181161	93697-005	RES CMF 1/8W 5% .05R
JC446	181161	93697-005	RES CMF 1/8W 5% .05R
JC447	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC448	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC449	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC450	181161	93697-005	RES CMF 1/8W 5% .05R
JC451	181161	93697-005	RES CMF 1/8W 5% .05R
JC452	181161	93697-005	RES CMF 1/8W 5% .05R
JC453	205408	XX80440-510	RES CMF 1/10W 10% .0R
L1201	190504	1C55100-02B	COIL 4.5UH
L2301	195708	1C51108-68A	COIL .68UH
L2302	197616	1C51109-22A	COIL 2.2UH
L2303	190506	1C55100-05B	COIL
L2304	190503	1C55100-01B	COIL
L2305	197616	1C51109-22A	COIL 2.2UH
L2306	206035	1471986-037	COIL
L2307	195711	1C51100-18A	COIL 18UH CTC169BT,BU,BW
L2307	210687	1C51100-12A	COIL 12UH CTC169PT,PU,PV,PW,PX
L2601	181131	2817795-006	COIL ADJ (.41 SQ BODY) (SEE NOTE@)
L2601	216800	1C55100-11A	COIL ADJ (.29 SQ BODY) (SEE NOTE@)
L2602	195710	1C51100-39A	COIL 39UH
L2603	160518	1C51100-10A	COIL 10UH
L2604	158726	2873607-121	COIL 4.7UH
L2702	195710	1C51100-39A	COIL 39UH
L2704	195750	1C51111-12A	COIL
L2705	158726	2873607-121	* COIL 4.7UH
L2706	175409	2873607-125	COIL 10UH
L2801	195712	1C51100-22A	COIL 22UH
L2802	195712	1C51100-22A	COIL 22UH
L2803	195712	1C51100-22A	COIL 22UH
L2804	200161	1C51100-33A	COIL
L3101	175409	2873607-125	COIL 10UH
L3601	161243	1C51101-10A	* COIL 100UH
L3602	207880	XX60245-200	COIL
L4101	190480	1497050-012	COIL 2.2UH
L4401	196064	1C51400-04A	* COIL
L4701	190729	2873607-133	COIL 47UH
L4702	175409	2873607-125	COIL 10UH
L4803	206391	2G32005-503	* COIL
Q1201	215495	XX11070-770	TRANSISTOR AUDIO BUFF
Q1401	215496	XX30946-660	TRANSISTOR VIDEO AMP
Q1402	215495	XX11070-770	TRANSISTOR VIDEO AMP
Q1403	143806	1417347-004	TRANSISTOR VIDEO BUFF
Q1404	215495	XX11070-770	TRANSISTOR CHROMA AMP
Q1405	215495	XX11070-770	TRANSISTOR CHROMA BUFF
Q1406	215495	XX11070-770	TRANSISTOR VIDEO BUFF
Q2301	146848	1417405-002	TRANSISTOR IF PREAMP
Q2302	215495	XX11070-770	TRANSISTOR AUDIO IF AMP
Q2701	215495	XX11070-770	TRANSISTOR VIDEO AMP
Q2702	146847	1417306-013	TRANSISTOR VIDEO AMP
Q2703	143806	1417347-004	TRANSISTOR BEAM LIMIT
Q2704	146847	1417306-013	TRANSISTOR HI APL LIMIT
Q2705	145410	1417330-011	TRANSISTOR HI APL LIMIT
Q2707	215495	XX11070-770	TRANSISTOR LUMA BUFFER
Q2709	215495	XX11070-770	TRANSISTOR CLAMP
Q2903	176980	1417309-006	TRANSISTOR RED DRIVER
Q2904	176980	1417309-006	TRANSISTOR BLU DRIVER
Q2905	176980	1417309-006	TRANSISTOR GRN DRIVER
Q2906	143806	1417347-004	TRANSISTOR LUMA BUFFER
Q2908	176980	1417309-006	TRANSISTOR RED OSD
Q2909	176980	1417309-006	TRANSISTOR BLU OSD
Q2910	176980	1417309-006	TRANSISTOR GRN OSD
Q2911	215495	XX11070-770	TRANSISTOR -Y BUFFER
Q2912	219412	XX15047-510	TRANSISTOR HORIZ BLANK BUFFER
Q3101	215496	XX30946-660	TRANSISTOR STBY SENSE
Q3102	215495	XX11070-770	TRANSISTOR RESET
Q3301	145410	1417330-011	TRANSISTOR SYNC SEP
Q3302	215495	XX11070-770	TRANSISTOR BLANKING SW
Q3303	215495	XX11070-770	TRANSISTOR CLAMP
Q3304	215496	XX30946-660	TRANSISTOR CLOSED CAPTION BUFFER
Q4101	203098	XX30910-196	TRANSISTOR REGULATOR OUT (SEE NOTE@)

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
Q4101	200165	XX10778-600	TRANSISTOR REGULATOR OUT (SEE NOTE@)
Q4105	143802	1417330-010	TRANSISTOR ERROR AMP
Q4106	143802	1417330-010	TRANSISTOR PWM GENER
Q4107	146847	1417306-013	TRANSISTOR PWM AMP
Q4109	146847	1417306-013	TRANSISTOR ERROR AMP
Q4111	215496	XX30946-660	TRANSISTOR CLAMP
Q4301	146847	1417306-013	TRANSISTOR ON/OFF SW
Q4302	200168	XX10905-400	TRANSISTOR HORIZ BUFF
Q4304	146847	1417306-013	TRANSISTOR ON/OFF BUFF
Q4305	215495	XX11070-770	TRANSISTOR ON/OFF BUFF
Q4306	215495	XX11070-770	TRANSISTOR ON/OFF BUFF
Q4401	200167	XX30792-600	TRANSISTOR HORIZ OUT
Q4402	215495	XX11070-770	TRANSISTOR HORIZ SYNC
Q4505	146847	1417306-013	TRANSISTOR V RAMP RESET
Q4506	148970	1417419-001	TRANSISTOR V RAMP LIMIT
Q4507	146847	1417306-013	TRANSISTOR V SYNC KILL
Q4601	146847	1417306-013	TRANSISTOR 5V STBY
Q4702	157627	1417364-003	TRANSISTOR 12V RUN
Q4703	157627	1417364-003	TRANSISTOR 5V RUN
Q4704	157627	1417364-003	TRANSISTOR 9V RUN
Q4705	146847	1417306-013	TRANSISTOR ON/OFF BUFF
Q4801	215496	XX30946-660	TRANSISTOR V PIN
Q4802	200168	XX10905-400	TRANSISTOR V PIN
Q4803	146847	1417306-013	TRANSISTOR V PIN
Q4804	215495	XX11070-770	TRANSISTOR PINCUSHION
Q4901	147665	1417406-003	* TRANSISTOR XRP
R1201	174366	93697-427	RES CMF 1/8W 5% 18K
R1203	174346	93697-389	RES CMF 1/8W 5% 470R CTC169BT,BU,BW
R1203	182628	93697-689	RES CMF 1/8W 2% 470R CTC169PT,PU,PV,PW,PX
R1204	181113	2821716-502	RES CONTROL BRT LEVEL
R1401	181066	93697-371	RES CMF 1/8W 5% 82R
R1402	829143	993230-688	* RES CF 1/4W 2% 430R
R1403	194917	1B14202-30A	RES CMF 1/10W 2% 3K
R1404	190464	93697-708	RES CMF 1/8W 2% 3K
R1405	181066	93697-371	RES CMF 1/8W 5% 82R
R1406	829143	993230-688	* RES CF 1/4W 2% 430R
R1408	173964	93697-372	RES CMF 1/8W 5% 91R
R1409	190462	93697-697	RES CMF 1/8W 2% 1K
R1410	197717	727832-149	* RES CF 1/4W 5% 390R CTC169BT,BU,BW
R1410	829143	993230-688	* RES CF 1/4W 2% 430R CTC169PT,PU,PV,PW,PX
R1411	194917	1B14202-30A	RES CMF 1/10W 2% 3K
R1412	197620	1B14213-11A	RES CMF 1/10W 5% 11K (SEE NOTE@)
R1412	202586	1B14202-11A	RES CMF 1/10W 2% 1.1K (SEE NOTE@)
R1413	181488	93697-685	RES CMF 1/8W 2% 330R
R1414	175321	2819434-704	RES CF 1/4W 2% 2K
R1416	181063	93697-370	RES CMF 1/8W 5% 75R
R1417	174364	93697-721	RES CMF 1/8W 2% 10K
R1418	175417	2819434-414	RES CF 1/4W 5% 5.1K
R1419	205291	XX11064-950	RES CMF 1/8W 2% 910R
R1420	182823	93697-700	RES CMF 1/8W 2% 1.3K
R1421	202585	1B14201-51A	RES CMF 1/10W 2% 510R
R1422	202586	1B14202-11A	RES CMF 1/10W 2% 1.1K CTC169BT,BW,PT,PW
R1422	192100	1B14212-10A	RES CMF 1/10W 5% 1K CTC169BU,PU,PV,PX
R1423	177535	2819434-387	RES CF 1/4W 5% 390R
R1424	159061	93697-369	RES CMF 1/8W 5% 68R
R1425	180816	93697-747	RES CMF 1/8W 2% 120K
R1426	182628	93697-689	RES CMF 1/8W 2% 470R
R1427	181482	93697-701	RES CMF 1/8W 2% 1.5K
R1428	181488	93697-685	RES CMF 1/8W 2% 330R
R1429	192081	1B14212-27A	RES CMF 1/10W 5% 2.7K
R1430	176648	2819434-707	RES CF 1/4W 2% 2.7K
R1431	162006	93697-411	RES CMF 1/8W 5% 3.9K CTC169BT,BW (SEE NOTE@)
R1431	175418	93697-414	RES CMF 1/8W 5% 5.1K CTC169BT,BW,PT,PW (SEE NOTE@)
R1431	181080	93697-409	RES CMF 1/8W 5% 3.3K CTC169BU,PU,PV,PX
R1432	829010	993272-349	* RES CFFP 1/4W 5% 10R
R1433	197903	1B14212-18A	RES CMF 1/10W 5% 1.8K
R1434	176818	93697-373	RES CMF 1/8W 5% 100R

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R2301	175325	2819434-373	* RES CF 1/4W 5% 100R
R2302	181482	93697-701	RES CMF 1/8W 2% 1.5K
R2303	178284	93697-687	RES CMF 1/8W 2% 390R
R2304	175741	93697-349	RES CMF 1/8W 5% 10R
R2305	159061	93697-369	RES CMF 1/8W 5% 68R
R2306	181486	93697-673	RES CMF 1/8W 2% 100R
R2307	181493	93697-692	RES CMF 1/8W 2% 620R
R2308	176367	93697-365	RES CMF 1/8W 5% 47R
R2309	178299	93697-415	RES CMF 1/8W 5% 5.6K
R2310	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R2311	181107	2821716-103	RES CONTROL RF AGC
R2312	193061	93697-431	RES CMF 1/8W 5% 27K
R2313	174355	93697-441	RES CMF 1/8W 5% 68K
R2314	207835	1B14214-18A	RES CMF 1/10W 5% 180K
R2315	192082	1B14212-15A	RES CMF 1/10W 5% 1.5K
R2317	205336	1B14211-30A	RES CMF 1/10W 5% 300R
R2318	201140	1B14211-24A	RES CMF 1/10W 5% 240R
R2319	179955	2819434-435	RES CF 1/4W 5% 39K
R2320	181486	93697-673	RES CMF 1/8W 2% 100R
R2321	175321	2819434-404	RES CF 1/4W 5% 2K
R2322	218508	XX70434-200	RES CMF 1/10W 5% 100R
R2323	200172	993272-327	* RES CF 1/4W 5% 1.2R
R2324	175045	2819434-385	RES CF 1/4W 5% 330R
R2325	195935	1B14210-82A	RES CMF 1/8W 5% 82R CTC169BT,BU,BW
R2325	192080	1B14210-22A	RES CMF 1/10W 5% 22R CTC169PT,PU,PV,PW,PX
R2326	205346	1B14212-56A	RES CMF 1/10W 5% 5.6K
R2601	197619	1B14210-75A	RES CMF 1/10W 5% 75R (SEE NOTE@)
R2601	192086	1B14211-15A	RES CMF 1/10W 5% 150R (SEE NOTE@)
R2602	174347	93697-390	RES CMF 1/8W 5% 510R (SEE NOTE@)
R2602	190460	93697-682	RES CMF 1/8W 2% 240R (SEE NOTE@)
R2603	181106	2821716-102	RES CONTROL NOTCH DEPTH CTC169BT,BU,BW
R2603	181112	2821716-501	RES CONTROL NOTCH DEPTH CTC169PT,PU,PV,PW,PX
R2604	190463	93697-699	REC CMF 1/8W 2% 1.2K CTC169BT,BU,BW
R2604	182823	93697-700	RES CMF 1/8W 2% 1.3K CTC169PT,PU,PV,PW,PX
R2605	175045	2819434-385	RES CF 1/4W 5% 330R (SEE NOTE@)
R2605	175354	2819434-384	RES CF 1/4W 5% 300R (SEE NOTE@)
R2606	182823	93697-400	RES CMF 1/8W 5% 1.3K CTC169BT,BU,BW
R2606	181056	93697-694	RES CMF 1/8W 2% 750R CTC169PT,PU,PV,PW,PX
R2607	176368	93697-394	RES CMF 1/8W 5% 750R CTC169BT,BU,BW
R2607	174348	93697-397	RES CMF 1/8W 5% 1K CTC169PT,PU,PV,PW,PX
R2608	829010	993272-349	RES CFFP 1/4W 5% 10R CTC169BT,BU,BW,PT, PV,PX
R2608	830B68	2821523-321	* RES MFFP 1/2W 5% .68R CTC169PU,PW
R2609	192098	1B14210-47A	RES CMF 1/10W 5% 47R (SEE NOTE@)
R2609	218508	XX70434-200	RES CMF 1/10W 5% 100R (SEE NOTE@)
R2701	218508	XX70434-200	RES CMF 1/10W 5% 100R
R2702	176979	2819434-382	RES CF 1/4W 5% 240R
R2703	174350	93697-413	RES CMF 1/8W 5% 4.7K
R2704	181071	93697-406	RES CMF 1/8W 5% 2.4K
R2705	175055	2819434-397	RES CF 1/4W 5% 1K
R2706	174364	93697-721	RES CMF 1/8W 2% 10K
R2707	200174	1B14214-20A	RES CMF 1/10W 5% 200K
R2708	175311	2819434-402	RES CF 1/4W 5% 1.6K (SEE NOTE@)
R2708	175367	2819434-701	RES CF 1/4W 5% 1.5K (SEE NOTE@)
R2709	181052	93697-408	RES CMF 1/8W 5% 3K (SEE NOTE@)
R2709	174349	93697-407	RES CMF 1/8W 5% 2.7K (SEE NOTE@)
R2710	181486	93697-673	RES CMF 1/8W 2% 100R

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R2711	181488	93697-685	RES CMF 1/8W 2% 330R CTC169BT,BU,BW
R2711	182628	93697-689	RES CMF 1/8W 2% 470R CTC169PT,PU,PV,PW,PX
R2712	174365	93697-423	RES CMF 1/8W 5% 12K (SEE NOTE@)
R2712	178299	93697-415	RES CMF 1/8W 5% 5.6K (SEE NOTE@)
R2713	205291	XX11064-950	RES CMF 1/8W 2% 910R
R2714	176816	93697-445	RES CMF 1/8W 5% 100K
R2715	181055	93697-384	RES CMF 1/8W 5% 300R
R2716	190462	93697-697	RES CMF 1/8W 2% 1K
R2718	175890	2819434-411	RES CF 1/4W 5% 3.9K
R2719	157214	990401-416	RES MF 1/4W 1% 14.3K
R2720	175055	2819434-397	RES CF 1/4W 5% 1K
R2721	206037	993153-193	* RES CC 1/2W 5% 27K
R2722	192081	1B14212-27A	RES CMF 1/10W 5% 2.7K
R2723	176648	2819434-407	RES CF 1/4W 5% 2.7K
R2724	175317	2819434-421	RES CF 1/4W 5% 10K
R2725	197637	1B14211-68A	RES CMF 1/10W 5% 680R CTC169BT,BU,BW
R2725	202914	1B14201-75A	RES CMF 1/10W 2% 750R CTC169PT,PU,PV,PW,PX
R2726	176814	93697-395	RES CMF 1/8W 5% 820R
R2727	176816	93697-445	RES CMF 1/8W 5% 100K
R2729	178281	93697-417	RES CMF 1/8W 5% 6.8K
R2730	181109	2821716-202	RES CONTROL CONT PRESET
R2731	181071	93697-406	RES CMF 1/8W 5% 2.4K
R2732	181482	93697-701	RES CMF 1/8W 2% 1.5K
R2733	174344	93697-383	RES CMF 1/8W 5% 270R CTC169BT,BU,BW
R2733	181493	93697-692	RES CMF 1/8W 2% 620R CTC169PT,PU,PV,PW,PX
R2734	190460	93697-682	RES CMF 1/8W 2% 240R CTC169BT,BU,BW (SEE NOTE@)
R2734	181491	93697-679	RES CMF 1/8W 2% 180R CTC169BT,BU,BW (SEE NOTE@)
R2734	181481	93697-683	RES CMF 1/8W 2% 270R CTC169BT,BU,BW (SEE NOTE@)
R2734	182822	93697-691	RES CMF 1/8W 2% 560R CTC169PT,PU,PV,PW,PX
R2736	181161	93697-005	RES CMF 1/8W 5% .05R CTC169BT,BU,BW (SEE NOTE@)
R2736	190461	93697-688	RES CMF 1/8W 2% 430R CTC169BT,BU,BW (SEE NOTE@)
R2736	178286	93697-693	RES CMF 1/8W 2% 680R CTC169PT,PU,PV,PW,PX
R2739	175325	2819434-373	RES CF 1/4W 5% 100R
R2740	182822	93697-691	RES CMF 1/8W 2% 560R
R2741	197642	1B14212-30A	RES CMF 1/10W 5% 3K (SEE NOTE@)
R2741	192082	1B14212-15A	RES CMF 1/10W 5% 1.5K (SEE NOTE@)
R2742	181482	93697-701	RES CMF 1/8W 2% 1.5K
R2801	190462	93697-697	RES CMF 1/8W 2% 1K
R2802	177366	2821716-303	RES CONTROL CHR FIL
R2803	174368	93697-432	RES CMF 1/8W 5% 30K
R2804	180816	93697-747	RES CMF 1/8W 2% 120K
R2805	181080	93697-409	RES CMF 1/8W 5% 3.3K
R2806	174363	93697-479	RES CMF 1/8W 5% 2.7M
R2809	181051	93697-402	RES CMF 1/8W 5% 1.6K
R2810	181051	93697-402	RES CMF 1/8W 5% 1.6K
R2811	181051	93697-402	RES CMF 1/8W 5% 1.6K
R2812	174366	93697-427	RES CMF 1/8W 5% 18K
R2813	174367	93697-729	RES CMF 1/8W 2% 22K
R2814	200176	1B14203-30A	RES CMF 1/10W 2% 30K
R2815	174360	93697-454	RES CMF 1/8W 5% 240K
R2816	181107	2821716-103	RES CONTROL TINT PRESET
R2817	200177	1B14211-27A	RES CMF 1/10W 5% 270R
R2901	190462	93697-697	RES CMF 1/8W 2% 1K
R2902	190462	93697-697	RES CMF 1/8W 2% 1K
R2903	190462	93697-697	RES CMF 1/8W 2% 1K
R2908	175308	2819434-399	RES CF 1/4W 5% 1.2K
R2910	181492	93697-681	RES CMF 1/8W 2% 220R
R2911	176366	93697-405	RES CMF 1/8W 5% 2.2K
R2912	180325	93697-428	RES CMF 1/8W 5% 20K
R2913	190533	2821761-452	RES CONTROL RED BIAS
R2914	181492	93697-681	RES CMF 1/8W 2% 220R
R2915	176366	93697-405	RES CMF 1/8W 5% 2.2K (SEE NOTE@)
R2915	192096	1B14212-22A	RES CMF 1/10W 5% 2.2K (SEE NOTE@)
R2916	180325	93697-428	RES CMF 1/8W 5% 20K
R2917	190533	2821761-452	RES CONTROL BLU BIAS
R2918	181492	93697-681	RES CMF 1/8W 2% 220R
R2919	176366	93697-405	RES CMF 1/8W 5% 2.2K
R2920	180325	93697-428	RES CMF 1/8W 5% 20K
R2921	190533	2821761-452	RES CONTROL GRN BIAS
R2922	181492	93697-681	RES CMF 1/8W 2% 220R
R2923	181491	93697-379	RES CMF 1/8W 5% 180R
R2924	829010	727832-111	* RES CC 1/4W 5% 10R
R2925	181486	93697-673	RES CMF 1/8W 2% 100R
R2926	190531	2821761-101	RES CONTROL RED/BLU DR
R2927	829027	2819434-359	RES CF 1/4W 5% 27R
R2928	190531	2821761-101	RES CONTROL GRN DRIVE
R2929	158491	93697-361	RES CMF 1/8W 5% 33R
R2930	176629	2819434-391	RES CF 1/4W 5% 560R
R2935	181488	93697-685	RES CMF 1/8W 2% 330R
R2938	178280	93697-680	RES CMF 1/8W 2% 200R
R2941	175363	2819434-680	RES CF 1/4W 2% 200R
R2942	182628	93697-689	RES CMF 1/8W 2% 470R
R2943	182628	93697-689	RES CMF 1/8W 2% 470R
R2944	176814	93697-395	RES CMF 1/8W 5% 820R
R2945	178280	93697-680	RES CMF 1/8W 2% 200R
R2946	190462	93697-697	RES CMF 1/8W 2% 1K
R2947	829010	993272-349	* RES CFFP 1/4W 5% 10R
R2948	200186	2819434-349	RES CF 1/4W 5% 10R
R2949	174345	93697-387	RES CMF 1/8W 5% 390R
R3101	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3102	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3103	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R3104	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3105	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R3106	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3107	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3108	174361	93697-469	RES CMF 1/8W 5% 1M
R3109	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3110	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3111	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3112	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3113	174350	93697-413	RES CMF 1/8W 5% 4.7K
R3114	205349	1B14212-82A	RES CMF 1/10W 5% 8.2K
R3115	174364	93697-721	RES CMF 1/8W 2% 10K
R3116	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3117	174364	93697-721	RES CMF 1/8W 2% 10K
R3118	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3119	175312	2819434-393	RES CF 1/4W 5% 680R
R3120	182822	93697-691	RES CMF 1/8W 2% 560R
R3121	174364	93697-721	RES CMF 1/8W 2% 10K
R3122	192070	1B14213-22A	RES CMF 1/10W 5% 22K
R3123	175055	2819434-397	RES CF 1/4W 5% 1K
R3125	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3126	192097	1B14212-47A	RES CMF 1/10W 5% 4.7K
R3128	197472	1B14211-56A	RES CMF 1/10W 5% 560R
R3129	197644	1B14211-82A	RES CMF 1/10W 5% 820R
R3130	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3131	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R3132	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R3135	176816	93697-445	RES CMF 1/8W 5% 100K
R3136	174364	93697-721	RES CMF 1/8W 2% 10K
R3138	174367	93697-729	RES CMF 1/8W 2% 22K
R3139	175055	2819434-397	RES CF 1/4W 5% 1K
R3140	175055	2819434-397	RES CF 1/4W 5% 1K
R3141	181486	93697-673	RES CMF 1/8W 2% 100R
R3142	176816	93697-445	RES CMF 1/8W 5% 100K
R3143	190462	93697-697	RES CMF 1/8W 2% 1K
R3201	218508	XX70434-200	RES CMF 1/10W 5% 100R
R3301	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3302	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3303	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3304	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3305	162006	93697-411	RES CMF 1/8W 5% 3.9K (SEE NOTE@)
R3305	174364	93697-721	RES CMF 1/8W 2% 10K (SEE NOTE@)
R3306	195937	1B14213-10A	RES CMF 1/10W 5% 10K (SEE NOTE@)
R3306	197633	1B14213-47A	RES CMF 1/10W 5% 47K (SEE NOTE@)

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R3307	205245	1B14203-27A	RES CMF 1/10W 2% 27K
R3308	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3309	200178	93697-718	RES CMF 1/8W 2% 7.5K
R3310	175040	2819434-365	* RES CF 1/4W 5% 47R
R3312	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3313	192097	1B14212-47A	RES CMF 1/10W 5% 4.7K
R3314	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3317	175317	2819434-421	RES CF 1/4W 5% 10K (SEE NOTE@)
R3317	175322	2819434-437	RES CF 1/4W 5% 47K (SEE NOTE@)
R3318	192091	1B14212-20A	RES CMF 1/10W 5% 2K
R3319	175046	2819434-432	RES CF 1/4W 5% 330R
R3320	192091	1B14212-20A	RES CMF 1/10W 5% 2K
R3321	179316	2819434-416	RES CF 1/4W 5% 6.2K
R3324	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3325	192097	1B14212-47A	RES CMF 1/10W 5% 4.7K
R3326	174350	93697-413	RES CMF 1/8W 5% 4.7K
R3327	174363	93697-479	RES CMF 1/8W 5% 2.7M
R3329	175055	2819434-397	RES CF 1/4W 5% 1K
R3330	175360	2819434-425	RES CF 1/4W 5% 15K
R3331	180369	93697-404	RES CMF 1/8W 5% 2K
R3332	192091	1B14212-20A	RES CMF 1/10W 5% 2K
R3333	193886	2819434-436	RES CF 1/4W 5% 43K
R3334	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R3335	200179	1B14202-68A	RES CMF 1/10W 2% 3K CTC169BT,BU,BW (SEE NOTE@)
R3335	205356	1B14203-18A	RES CMF 1/10W 2% 18K CTC169BT,BU,BW (SEE NOTE@)
R3335	205353	1B14203-13A	RES CMF 1/10W 2% 13K CTC169PT,PU,PV,PW,PX
R3336	175047	2819434-415	RES CF 1/4W 5% 5.6K (SEE NOTE@)
R3336	175413	2819434-413	RES CF 1/4W 5% 4.7K (SEE NOTE@)
R3338	175306	2819434-441	RES CF 1/4W 5% 68K (SEE NOTE@)
R3338	175046	2819434-432	RES CF 1/4W 5% 330R (SEE NOTE@)
R3339	175055	2819434-397	RES CF 1/4W 5% 1K
R3340	197643	1B14212-91A	RES CMF 1/10W 5% 9.1K
R3341	162005	93697-442	RES CMF 1/8W 5% 75K
R3342	200180	1B14203-91A	RES CMF 1/10W 2% 91K
R3343	178285	93697-724	RES CMF 1/8W 2% 13K
R3344	174365	93697-423	RES CMF 1/8W 5% 12K
R3345	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3346	200181	2821716-152	RES CONTROL SUB-BRITE
R3347	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3348	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3349	175055	2819434-397	RES CF 1/4W 5% 1K
R3351	181062	93697-438	RES CMF 1/8W 5% 51K
R3352	175317	2819434-421	RES CF 1/4W 5% 10K
R3353	176648	2819434-407	RES CF 1/4W 5% 2.7K
R3601	175317	2819434-421	RES CF 1/4W 5% 10K
R3602	174364	93697-721	RES CMF 1/8W 2% 10K
R3603	181491	93697-379	RES CMF 1/8W 5% 180R
R3604	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3605	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R4001	200444	1B08739-18A	RES WW 15W 10% 1.8R
R4002	183127	2817488-003	* RES CF 1/2W 5% 2.7M
R4003	200182	2874125-433	RES MF 2W 5% 33K
R4101	175054	2819434-429	RES CF 1/4W 5% 22K
R4102	175413	2819434-713	RES CF 1/4W 2% 4.7K
R4103	175315	2819434-438	* RES CF 1/4W 5% 51K
R4104	175311	2819434-702	RES CF 1/4W 2% 1.6K (SEE NOTE@)
R4104	175367	2819434-701	RES CF 1/4W 2% 1.5K (SEE NOTE@)
R4105	179238	2819434-442	RES CF 1/4W 5% 75K
R4107	175374	2819435-357	RES CF 1/2W 5% 22R
R4108	203097	2819434-696	RES CF 1/4W 2% 910R
R4109	203745	2819434-700	RES CF 1/4W 2% 1.3K CTC169BT,BU,BW,PT, PU,PW
R4109	175055	2819434-397	RES CF 1/4W 5% 1K CTC169PV,PX
R4110	200183	1B08228-18A	* RES WW 2W 5% .18R
R4113	190525	2821716-301	RES CONTROL STBY ADJ
R4114	176506	990401-464	RES MF 1/4W 1% 45.3K
R4115	200184	990401-350	RES MF 1/4W 1% 3240R

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R4116			* RES CONTROL PART OF CR4111 B+ REG KIT
R4117	175040	2819434-365	RES CF 1/4W 5% 47R
R4119	200185	1B08521-33A	* RES WW 7W 5% 330R
R4120	200186	2819434-649	RES CF 1/4W 2% 10R
R4125	176796	2819435-373	RES CF 1/2W 5% 100R
R4126	200188	2874126-347	* RES MF 3W 5% 8.2R (SEE NOTE@)
R4126	206016	1B08329-68A	* RES WW 3W 5% 6.8R (SEE NOTE@)
R4127	175367	2819434-401	RES CF 1/4W 5% 1.5K
R4128	177535	2819434-387	RES CF 1/4W 5% 390R
R4129	180369	93697-404	RES CMF 1/8W 5% 2K
R4135	175317	2819434-421	RES CF 1/4W 5% 10K
R4136	175308	2819434-399	RES CF 1/4W 5% 1.2K
R4137	175055	2819434-397	RES CF 1/4W 5% 1K
R4139	174364	93697-721	RES CMF 1/8W 2% 10K
R4140	181494	93697-443	RES CMF 1/8W 5% 82K
R4142	175042	2819434-405	RES CF 1/4W 5% 2.2K
R4143	175042	2819434-405	RES CF 1/4W 5% 2.2K
R4144	175373	2819435-403	RES CF 1/2W 5% 1.8K
R4145	174364	93697-721	RES CMF 1/8W 2% 10K
R4146	174350	93697-413	RES CMF 1/8W 5% 4.7K
R4147	179259	2874124-429	RES MFFP 1W 5% 22K
R4148	200189	990401-471	RES MF 1/4W 1% 53.6K
R4149	831A12	2874124-327	* RES MFFP 1W 5% 1.2R
R4150	174340	93697-357	RES CMF 1/8W 5% 22R
R4151	176814	93697-395	RES CMF 1/8W 5% 820R
R4152	182628	93697-689	RES CMF 1/8W 2% 470R
R4302	181496	93697-416	RES CMF 1/8W 5% 6.2K
R4303	194914	1B14211-33A	RES CMF 1/10W 5% 330R
R4306	190533	2821761-452	RES CONTROL CENTERING CTC169BT,BU,BW
R4306	200417	2821761-153	RES CONTROL CENTERING CTC169PT,PU,PV,PW,PX
R4307	180469	2819434-427	RES CF 1/4W 5% 18K CTC169BT,BU,BW (SEE NOTE@)
R4307	196081	990401-442	RES CF 1/4W 1% 26.7K CTC169BT,BU,BW (SEE NOTE@)
R4307	175046	2819434-732	RES CF 1/4W 2% 330R CTC169PT,PU,PV,PW,PX
R4308	181485	93697-375	RES CMF 1/8W 2% 120R
R4309	175325	2819434-373	RES CF 1/4W 5% 100R
R4310	179798	2819435-395	RES CF 1/2W 5% 820R
R4311	175363	2819434-680	RES CF 1/4W 2% 200R
R4312	175040	2819434-365	* RES CF 1/4W 5% 47R
R4313	176673	2874124-373	RES MFFP 1W 5% 100R (SEE NOTE@)
R4313	176796	2819435-373	RES CF 1/2W 5% 100R (SEE NOTE@)
R4314	200192	2819435-363	* RES CF 1/2W 5% 39R
R4315	191146	2819435-419	RES CF 1/2W 5% 8.2K
R4317	177535	2819434-387	RES CF 1/4W 5% 390R
R4318	181491	93697-379	RES CMF 1/8W 5% 180R
R4319	175325	2819434-373	RES CF 1/4W 5% 100R
R4320	197472	1B14211-56A	RES CMF 1/10W 5% 560R CTC169BT,BU,BW (SEE NOTE@)
R4320	155137	93697-391	RES CMF 1/8W 5% 560R CTC169BT,BU,BW (SEE NOTE@)
R4321	175044	2819434-445	RES CF 1/4W 5% 100K
R4322	218508	XX70434-200	RES CMF 1/10W 5% 100R
R4323	175363	2819434-680	RES CF 1/4W 2% 200R
R4324	175418	93697-714	RES CMF 1/8W 2% 5.1K
R4326	195938	1B14202-33A	RES CMF 1/10W 2% 330R
R4327	175360	2819434-725	RES CF 1/4W 2% 15K
R4328	175418	93697-714	RES CMF 1/8W 2% 5.1K
R4401	176651	2819435-381	* RES CF 1/2W 5% 220R
R4402	181098	2819435-349	* RES CF 1/2W 5% 10R
R4404	175364	2819435-393	RES CF 1/2W 5% 680R
R4406	175364	2819435-393	RES CF 1/2W 5% 680R
R4407	175351	2819434-428	RES CF 1/4W 5% 20K (SEE NOTE@)
R4407	175413	2819434-414	RES CF 1/4W 5% 4.7K (SEE NOTE@)
R4408	175054	2819434-429	RES CF 1/4W 5% 22K (SEE NOTE@)
R4408	175417	2819434-414	RES CF 1/4W 5% 5.1K (SEE NOTE@)

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R4409	175413	2819434-413	RES CF 1/4W 5% 4.7K (SEE NOTE@)
R4409	175042	2819434-405	RES CF 1/4W 5% 2.2K (SEE NOTE@)
R4501	175047	2819434-415	RES CF 1/4W 5% 5.6K CTC169BT,BU,BW
R4501	175413	2819434-713	RES CF 1/4W 2% 4.7K CTC169PT,PU,PV,PW,PX
R4503	178299	93697-415	RES CMF 1/8W 5% 5.6K
R4504	175312	2819434-393	RES CF 1/4W 5% 680R
R4505	200445	993291-330	RES MF 1/2W 5% 1.6R
R4506	200194	2819435-390	RES CF 1/2W 5% 510R
R4507	177816	2819434-459	RES CF 1/4W 5% 390K
R4508	179955	2819434-435	RES CF 1/4W 5% 39K
R4509	174364	93697-721	RES CMF 1/8W 2% 10K
R4510	174364	93697-721	RES CMF 1/8W 2% 10K
R4511	181065	93697-719	RES CMF 1/8W 2% 8.2K
R4512	181484	93697-403	RES CMF 1/8W 5% 1.8K
R4513	181485	93697-375	RES CMF 1/8W 2% 120R
R4514	181062	93697-438	RES CMF 1/8W 5% 51K
R4515	205346	1B14212-56A	RES CMF 1/10W 5% 5.6K
R4516	175306	2819434-441	RES CF 1/4W 5% 68K
R4517	175055	2819434-397	RES CF 1/4W 5% 1K
R4518	829147	993272-389	* RES CFFP 1/4W 5% 470R
R4519	176793	2819435-389	RES CF 1/2W 5% 470R
R4520	179248	2819435-417	* RES CF 1/2W 5% 6.8K
R4521	181060	93697-426	RES CMF 1/8W 5% 16K
R4522	200417	2821761-153	RES CONTROL VERT HEIGHT
R4523	200446	2874124-408	* RES MF 1W 5% 3K
R4524	197633	1B14213-47A	RES CMF 1/10W 5% 47K
R4525	174366	93697-427	RES CMF 1/8W 5% 18K
R4526	181073	93697-418	RES CMF 1/8W 5% 7.5K CTC169BT,BU,BW
R4526	200178	93697-718	RES CMF 1/8W 2% 7.5K CTC169PT,PU,PV,PW,PX
R4539	181494	93697-443	RES CMF 1/8W 5% 82K
R4542	175417	2819434-414	RES CF 1/4W 5% 5.1K CTC169BT,BU,BW
R4542	204315	2819435-414	RES CF 1/2W 5% 5.1K CTC169PT,PU,PV,PW,PX
R4543	181075	93697-461	RES CMF 1/8W 5% 470K
R4544	200197	993272-341	* RES CFFP 1/4W 5% 4.7R
R4545	181490	93697-753	RES CMF 1/8W 2% 220K
R4546	174355	93697-441	RES CMF 1/8W 5% 68K
R4547	192084	XX50886-630	RES CMF 1/10W 5% 100K
R4548	224267	2819435-401	RES CF 1/2W 5% 1.5K
R4602	175312	2819434-393	RES CF 1/4W 5% 680R
R4604	176457	2819434-469	RES CF 1/4W 5% 1M
R4701	830010	993273-349	* RES CFFP 1/2W 5% 10R
R4703	195730	1B08329-33A	* RES WW 3W 5% 3.3R
R4705	176647	2819434-392	RES CF 1/4W 5% 620R
R4710	829012	993272-351	* RES CF 1/4W 2% 12R
R4711	175354	2819434-384	RES CF 1/4W 5% 300R
R4712	175314	2819434-433	RES CF 1/4W 5% 33K
R4713	200198	2819435-441	* RES CF 1/2W 5% 68K (SEE NOTE@)
R4713	830368	993114-569	* RES CF 1/2W 2% 68K (SEE NOTE@)
R4714	175325	2819434-373	RES CF 1/4W 5% 100R
R4715	175363	2819434-680	RES CF 1/4W 2% 200R
R4716	175312	2819434-693	RES CF 1/4W 2% 680R
R4717	175318	2819434-667	RES CF 1/4W 2% 56R
R4718	181486	93697-673	RES CMF 1/8W 2% 100R
R4719	830147	993273-389	* RES CF 1/2W 5% 470R
R4720	830010	993273-349	* RES CFFP 1/2W 5% 10R
R4802	200199	2821761-202	RES CONTROL WIDTH
R4803	176816	93697-445	RES CMF 1/8W 5% 100K
R4804	174355	93697-441	RES CMF 1/8W 5% 68K
R4805	181107	2821716-103	RES CONTROL E/W PIN AMP
R4806	176648	2819434-407	RES CF 1/4W 5% 2.7K
R4807	179955	2819434-435	RES CF 1/4W 5% 39K
R4808	181484	93697-403	RES CMF 1/8W 5% 1.8K
R4809	175769	2819435-387	* RES CF 1/2W 5% 390R
R4810	177535	2819434-387	RES CF 1/4W 5% 390R
R4812	181073	93697-418	RES CMF 1/8W 5% 7.5K CTC169BT,BU,BW
R4812	200178	93697-718	RES CMF 1/8W 2% 7.5K CTC169PT,PU,PV,PW,PX
R4813	180325	93697-428	RES CMF 1/8W 5% 20K
R4814	180369	93697-404	RES CMF 1/8W 5% 2K
R4815	178299	93697-415	RES CMF 1/8W 5% 5.6K
R4817	176668	2819434-461	RES CF 1/4W 5% 470K

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R4818	200200	2874124-406	RES MF 1W 5% 2.4K
R4819	179238	2819434-442	RES CF 1/4W 5% 75K
R4821	175784	2874124-377	* RES MFFP 1W 5% 150R
R4822	197474	1B14213-15A	RES CMF 1/10W 5% 15K
R4822	205354	1B14203-15A	RES CMF 1/10W 2% 15K
R4823	205408	1B14229-00A	RES CMF 1/10W .0R
R4824	192084	1B14214-10A	RES CMF 1/10W 5% 100K (SEE NOTE@)
R4824	205376	1B14204-30A	RES CMF 1/10W 2% 300K (SEE NOTE@)
R4825	197471	1B14213-68A	RES CMF 1/10W 5% 68K
R4826	192097	XX30944-310	RES CMF 1/10W 5% 4.7K
R4901	175317	2819434-421	* RES CF 1/4W 5% 10K
R4902	175325	2819434-373	* RES CF 1/4W 5% 100R
R4903	196114	990401-449	* RES MF 1/4W 1% 31.6K
R4904	204794	990401-465	RES MF 1/4W 1% 46.4K
R4905	175054	2819434-729	RES CF 1/4W 2% 22K
R4920	175417	2819434-714	RES CF 1/4W 2% 5.1K
R4922	197470	1B14213-20A	RES CMF 1/10W 5% 20K
RT4501	181161	93697-005	RES CMF 1/8W 5% .05R
SCR501	197591	1415780-009	SCR
SF2301	200203	1C40002-01A	FILTER ACOUSTIC WAVE
T4101	200204	1C67101-01A	* TRANSFORMER ISO DRIVER
T4102	201625	1C61106-03D	* TRANSFORMER SMT CTC169BT,BU,BW (SEE NOTE@)
T4102	207885	2G25021-B4B	* TRANSFORMER SMT CTC169BT,BU,BW,PT, PU,PW (SEE NOTE@)
T4102	210896	2G25021-B7A	* TRANSFORMER SMT CTC169PV,PX
T4301	206394	2G32005-501	* TRANSFORMER HORIZ DR/VERT
T4401	200450	2G25018-502	* TRANSFORMER IHVT W/ SHRINK TUBING (FOR CHASSIS W/SLOT UNDER MTG AREA)
T4401	232191	2G25018-A3A	* TRANSFORMER IHVT (FOR CHASSIS W/NO SLOT UNDER MTG AREA)
U1001	200137	1A51125-01A	* IC SIGNAL DEFL/PROCESS
U1401	161079	1421826-001	IC AUDIO SWITCHING
U2601	179729	1421886-001	IC ANALOG COMB
U3101	210736	1A66107-32D	IC DIG MICROPROCESSOR
U3200	210633	1A64105-51A	IC EEPROM CTC169BT
U3200	210631	1A64105-49A	IC EEPROM CTC169BU
U3200	210632	1A64105-50A	IC EEPROM CTC169BW
U3200	210718	1A64105-60A	IC EEPROM CTC169PT
U3200	210716	1A64105-58A	IC EEPROM CTC169PU,PV
U3200	210717	1A64105-59A	IC EEPROM CTC169PW
U3200	210903	1A64105-62A	IC EEPROM CTC169PX
U4101	200419	1A51117-01A	* IC REGULATOR CONTROL
U4501	200420	1A51123-01A	IC VERTICAL SWITCH
U4801	200420	1A51123-01A	IC PINCUSHION
Y2801	161235	2816766-002	CRYSTAL 3.58MHZ
Y3101	182839	2816766-004	CRYSTAL 8MHZ
Y4301	200210	XX11004-909	RESONATOR
	180857	1448216-003	BEAD, CERAMIC
	202018	6R04012-03B	* BRACKET, SUPPORT BIAS DRIVE
	181138	2862928-001	CLIP, FOR Q4101 (SMALL)
	181032	2862928-002	CLIP, FOR Q4101 (LARGE)
	200216	8R10006-01C	* HOUSING, FOCUS
	250045	6R23005-01A	* LENS, LED/LDR
	135255	59149-106	NUT, CONTROL MTG
	203754	6R16010-01B	* OVERLAY, JACK PANEL RF SWITCH
	203772	6R16011-01A	* OVERLAY, JACK PANEL TUNER
	204808	6R16012-01B	* OVERLAY, JACK PANEL SVHS
	204807	8R14007-01G	* PANEL, JACK
	139301	1479290-001	RETAINER, BEAD CHAIN
	154382	1449749-017	SUPPORT, FOR DNR PCB
	204822	1449749-028	SUPPORT, FOR HV REG PCB

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	154385	2870929-003	WIRE TIE, TWIST END

CHASSIS FAMILY 3

CTC169PA
CTC169PB
CTC169PC
CTC169PD

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
C1201	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C1203	190499	1C30179-47A	CAP LYTC 4.7UF M 100V
C1204	174402	2861142-33A	CAPCC 10PF F NPO 50V
C1401	208429	XX43329-660	CAP LYTC 47UF M 16V
C1402	208429	XX43329-660	CAP LYTC 47UF M 16V
C1403	193043	1C30230-47A	CAP LYTC 47UF M 25V
C1404	193043	1C30230-47A	CAP LYTC 47UF M 25V
C1405	189978	1C30121-22A	CAP LYTC 220UF M 16V
C1406	181090	2861143-14A	CAPCC 39PF J NPO 50V
C1407	181091	2861143-84A	CAPCC 150PF J NPO 50V
C1408	216802	XX20438-725	CAP LYTC 10UF M 16V
C1409	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C1410	210893	1C18571-47A	CAPCC 470PF K X7R 50V
C1411	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C1412	189981	1C30150-10A	CAP LYTC 10UF M 50V
C2301	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C2302	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C2303	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C2304	160077	1C30178-47A	CAP LYTC .47UF M 100V
C2305	190551	2861146-75Z	CAPCC .022UF K X7R 50V
C2306	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C2307	190499	1C30179-47A	CAP LYTC 4.7UF M 100V
C2308	190543	2861143-94A	CAPCC 180PF J NPO 50V
C2309	174403	2861142-44A	CAPCC 12PF J NPO 50V
C2310	194440	1C18500-18A	CAPCC 18PF K NPO 50V
C2311	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C2312	174401	2861141-92A	CAPCC 7PF D NPO 50V
C2313	190500	1C31121-18A	CAP LYTC 180UF M 16V
C2314	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C2315	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C2316	200139	2861144-64A	CAPCC 560PF J NPO 50V
C2317	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C2601	143879	2841253-92M	CAPCD 1000PF K Z5P 50V
C2602	174408	2861142-94A	CAPCC 33PF J NPO 50V
C2603	174412	2861143-64A	CAPCC 100PF J NPO 50V
C2604	174404	2861142-54A	CAPCC 15PF J NPO 50V
C2605	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C2606	197600	1C18572-10A	CAPCC 1000PF K X7R 50V (SEE NOTE@)
C2606	214035	1C18401-47A	CAPCC 470PF J NPO 50V (SEE NOTE@)
C2701	200141	2821714-224	CAP POLY .1UF K 63V
C2704	174402	2861142-32A	CAPCC 10PF F NPO 50V
C2705	220998	1C30179-10A	CAP LYTC 1UF M 100V
C2706	220998	1C30179-10A	CAP LYTC 1UF M 100V
C2707	174412	2861143-64A	CAPCC 100PF J NPO 50V
C2708	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C2709	220998	1C30179-10A	CAP LYTC 1UF M 100V
C2710	176851	1C30120-33A	CAP LYTC 33UF M 16V
C2711	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C2712	189981	1C30150-10A	CAP LYTC 10UF M 50V
C2715	200436	1C30169-68A	CAP LYTC 6.8UF M 63V
C2717	190520	2821714-228	CAP POLY .22UF K 63V
C2718	174412	2861143-64A	CAPCC 100PF J NPO 50V
C2720	175120	1C30179-68A	CAP LYTC 6.8UF M 100V
C2723	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
C2724	193338	1C18501-18A	CAPCC 180PF J NPO 50V
C2801	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C2802	195691	1C30179-22A	CAP LYTC 2.2UF M 100V
C2803	190551	2861146-75Z	CAPCC .022UF K X7R 50V
C2804	174404	2861142-54A	CAPCC 15PF J NPO 50V
C2805	220998	1C30179-10A	CAP LYTC 1UF M 100V
C2806	151119	1C30179-33A	CAP LYTC 3.3UF M 100V
C2807	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C2808	210892	1C18573-18A	CAPCC .018PF K X7R 50V
C2809	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C2810	190500	1C31121-18A	CAP LYTC 180UF M 16V
C2811	194903	1C18400-22A	CAPCC 22PF J NPO 50V
C2812	194903	1C18400-22A	CAPCC 22PF J NPO 50V
C2813	194903	1C18400-22A	CAPCC 22PF J NPO 50V
C2814	174410	2861143-44A	CAPCC 68PF J NPO 50V
C2815	192050	1C18500-27A	CAPCC 27PF K NPO 50V
C2905	174409	2861143-24A	CAPCC 47PF J NPO 50V
C2909	190542	2861143-34A	CAPCC 56PF J NPO 50V
C2910	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C2911	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C2918	193036	2861144-55Z	CAPCC 470PF K X7R 50V
C2919	193036	2861144-55Z	CAPCC 470PF K X7R 50V
C2920	200143	2861144-45Z	CAPCC 390PF K X7R 50V
C2927	175397	2861143-95A	CAPCC 180PF K NPO 50V
C2928	197600	1C18572-10A	CAPCC 1000PF K X7R 50V
C3101	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3102	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3103	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C3104	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3105	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3106	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3107	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3108	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3109	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3110	194903	1C18500-22A	CAPCC 22PF K NPO 50V
C3114	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3115	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C3116	200144	1C18572-68A	CAPCC 6800PF K X7R 50V
C3117	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3119	174408	2861142-94A	CAPCC 33PF J NPO 50V (SEE NOTE@)
C3119	234655	XX10154-670	CAPCC 30PF J NPO 50V (SEE NOTE@)
C3120	174408	2861142-94A	CAPCC 33PF J NPO 50V (SEE NOTE@)
C3120	234655	XX10154-670	CAPCC 30PF J NPO 50V (SEE NOTE@)
C3121	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3123	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3124	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3125	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3126	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3127	197600	1C18572-10A	CAPCC 1000PF K X7R 50V
C3128	200139	2861144-64A	CAPCC 560PF J NPO 50V
C3129	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C3144	202904	1C18501-56A	CAPCC 560PF K NPO 50V
C3145	193340	1C18501-10A	CAPCC 100PF K NPO 50V
C3201	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C3301	174412	2861143-64A	CAPCC 100PF J NPO 50V
C3302	174412	2861143-64A	CAPCC 100PF J NPO 50V
C3303	193340	1C18401-10A	CAPCC 100PF J NPO 50V
C3304	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C3305	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3307	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3308	197600	1C18572-10A	CAPCC 1000PF K X7R 50V
C3309	197600	1C18572-10A	CAPCC 1000PF K X7R 50V
C3310	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
C3311	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3312	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3313	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C3314	178188	2861144-14A	CAPCC 220PF J NPO 50V
C3315	174412	2861143-64A	CAPCC 100PF J NPO 50V
C3316	202904	1C18501-56A	CAPCC 560PF K NPO 50V
C3317	202907	1C18400-15A	CAPCC 15PF J NPO 50V
C3318	174407	2861142-84A	CAPCC 27PF J NPO 50V
C3319	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3320	174407	2861142-84A	CAPCC 27PF J NPO 50V
C3321	174407	2861142-84A	CAPCC 27PF J NPO 50V
C3322	220998	1C30179-10A	CAP LYTC 1UF M 100V
C3323	192049	1C18400-82A	CAPCC 82PF J NPO 50V
C3602	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C3603	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C3604	190500	1C31121-18A	CAP LYTC 180UF M 16V
C3605	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C3606	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C4002	190538	2821785-005	* CAPCD 680PF M Z5P 1KV
C4005	190538	2821785-005	* CAPCD 680PF M Z5P 1KV
C4006	250102	2870613-109	* CAP CAPRISTOR
C4007	190561	2875500-009	* CAP LYTC 820UF K 200V
C4008	195697	1C10106-21A	* CAPCD 5000PF M Z5V 120V (SEE NOTE@)
C4008	223330	XX10043-400	* CAPCD 3400PF M Z5V 120V (SEE NOTE@)
C4009	195749	2821785-002	CAPCD .012UF M Z5U 250V

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
C4101	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C4102	195691	1C30279-22A	CAP LYTC 2.2UF M 100V
C4103	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C4104	189982	1C30250-15A	CAP LYTC 15UF M 50V
C4105	181099	2821714-330	CAP POLY .33UF J 50V
C4106	174421	2861145-45Z	CAPCC 2200PF K X7R 50V
C4107	143879	2841253-92M	CAPCD 1000PF K Z5P 50V
C4108	208002	1C31170-39A	CAP LYTC 39UF M 100V
C4109	200145	2841260-42M	CAPCD 1800PF K Z5P 250V
C4110	143242	1490360-006 *	CAPCD 470PF J N1500 1.5KV (SEE NOTE@)
C4110	227068	XX15065-090 *	CAPCD 470PF J SL 2KV (SEE NOTE@)
C4111	190538	2821785-005	CAPCD 680PF M Z5P 1KV
C4112	201619	1C20120-09A *	CAP POLY 5600PF J 800V
C4113	195699	2861146-85Z	CAPCC .027UF K X7R 50V
C4115	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C4116	149717	2841253-52M	CAPCD 470PF K Z5P 50V
C4118	190496	1C30241-47A	CAP LYTC 470UF M 35V
C4136	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C4138	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C4139	179277	2861147-25Z	CAPCC .047UF J X7R 50V
C4140	190538	2821785-005	CAPCD 680PF M Z5P 1KV
C4141	200147	2875500-10A *	CAP LYTC 470UF M 180V
C4142	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C4143	175119	1C30242-10A	CAP LYTC 1000UF M 35V
C4144	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C4145	190721	1C31142-10A	CAP LYTC 1000UF 35V
C4146	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C4147	190497	1C30251-68A	CAP LYTC 680UF K 50V
C4148	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C4149	190497	1C30251-68A	CAP LYTC 680UF K 50V
C4150	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C4151	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C4152	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C4153	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
C4154	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C4155	210893	1C18451-47A	CAPCC 470PF J N750 50V
C4301	220998	1C30179-10A	CAP LYTC 1UF M 100V
C4302	195692	2861146-55Z	CAPCC .015UF K X7R 50V
C4303	190551	2861146-75Z	CAPCC .022UF K X7R 50V
C4304	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
C4305	190548	2861145-85Z	CAPCC 4700PF K X7R 50V
C4306	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C4307	175120	1C30179-68A	CAP LYTC 6.8UF M 100V
C4309	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C4310	200153	2821714-320	CAP POLY .047UF J 63V
C4311	190499	1C31159-47A	CAP LYTC 4.7UF M 50V
C4312	149727	2841254-32M	CAPCD 1800PF K Z5P 50V
C4313	200148	1C18672-47A	CAPCC 4700PF M X7R 50V
C4314	193036	2861144-55Z	CAPCC 470PF K X7R 50V
C4315	174403	2861142-44A	CAPCC 12PF J NPO 50V
C4316	210894	2841253-73J	CAPCD 680PF J SL 50V
C4401	206009	XX80408-465 *	CAP POLY .0162UF HP 1.6KV
C4402	200149	1C20120-06A *	CAP POLY .056UF J 400V
C4405	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C4406	143242	1490360-006 *	CAPCD 470PF J N1500 1.5KV
C4407	190534	2821785-001 *	CAPCD 4700PF K Z5P 250V
C4502	179623	2841261-12M	CAPCD 5600PF K Z5P 250V
C4503	200151	1490001-72A *	CAP LYTC 2200UF K 35V
C4504	160077	1C30178-47A	CAP LYTC .47UF M 100V
C4505	189982	1C30250-15A	CAP LYTC 15UF M 50V
C4511	200439	1C20110-46A *	CAP POLY .99UF J 250V
C4512	195691	1C30179-22A	CAP LYTC 2.2UF M 100V
C4518	181099	2821714-330	CAP POLY .33UF J 50V
C4519	181099	2821714-330	CAP POLY .33UF J 50V
C4520	151578	1C30240-33A	CAP LYTC 33UF M 35V
C4521	205192	1C15199-01C	CAPCD 8200PF K X7R 50V
C4522	200153	2821714-320	CAP POLY .047UF J 63V
C4523	179277	2861147-25Z	CAPCC .047UF J X7R 50V
C4524	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C4525	160077	1C30178-47A	CAP LYTC .47UF M 100V
C4610	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C4611	189981	1C30150-10A	CAP LYTC 10UF M 50V
C4612	176302	1C30111-10A	CAP LYTC 100UF M 10V
C4701	146158	2821714-821	CAP POLY .056UF K 250V
C4702	190538	2821785-005	CAPCD 680PF M Z5P 1KV
C4703	190479	1490001-062	CAP LYTC 47UF M 250V
C4704	190538	2821785-005	CAPCD 680PF M Z5P 1KV
C4705	190497	1C30251-68A	CAP LYTC 680UF K 50V

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
C4706	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C4707	179277	2861147-25Z	CAPCC .047UF J X7R 50V
C4711	193043	1C30130-47A	CAP LYTC 47UF M 25V (SEE NOTE@)
C4711	161285	XX20467-280	CAP LYTC 220UF M 35V (SEE NOTE@)
C4712	192846	1C30120-68A	CAP LYTC 68UF M 16V
C4713	190538	2821785-005	CAPCD 680PF M Z5P 1KV
C4714	194581	1C30131-10A	CAP LYTC 100UF M 25V
C4715	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C4801	196060	2841204-05A	CAP LYTC 10UF M 35V
C4802	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C4807	189981	1C30150-10A	CAP LYTC 10UF M 50V
C4808	192846	1C30120-68A	CAP LYTC 68UF M 16V
C4811	174421	2861145-45Z	CAPCC 2200PF K X7R 50V
C4812	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C4813	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C4814	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C4815	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C4816	204791	2821714-209	CAP POLY 5600PF K 63V
C4817	190520	2841258-92M	CAPCD 150PF K Z5P 250V
C4901	141722	2841258-92M	CAPCD 150PF K Z5P 250V
C4902	202011	2821714-324	CAP POLY .1UF J 63V
C4903	143879	2841253-92M	CAPCD 1000PF K Z5P 50V
C4905	220998	1C30179-10A *	CAP LYTC 1UF M 100V (SEE NOTE@)
C4905	151119	XX11054-840 *	CAP LYTC 3.3UF M 100V (SEE NOTE@)
C4906	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
CF1201	195702	1496278-005	FILTER CERAMIC
CF2301	181125	2821737-001	FILTER
CR1401	176746	99201-210	DIODE ZENER 5.6V .4W (SEE NOTE@)
CR1401	215488	XX11073-650	DIODE ZENER 5.6V .5W (SEE NOTE@)
CR1402	176746	99201-210	DIODE ZENER 5.6V .4W (SEE NOTE@)
CR1402	215488	XX11073-650	DIODE ZENER 5.6V .5W (SEE NOTE@)
CR1403	176746	99201-210	DIODE ZENER 5.6V .4W (SEE NOTE@)
CR1403	215488	XX11073-650	DIODE ZENER 5.6V .5W (SEE NOTE@)
CR1404	176746	99201-210	DIODE ZENER 5.6V .4W (SEE NOTE@)
CR1404	215488	XX11073-650	DIODE ZENER 5.6V .5W (SEE NOTE@)
CR1405	192848	99201-215	DIODE ZENER 9.1V .4W
CR1406	164874	1471872-010	DIODE
CR2701	164717	1471872-006	DIODE
CR2702	164717	1471872-006	DIODE
CR2703	164717	1471872-006	DIODE
CR2704	164717	1471872-006	DIODE
CR2705	164717	1471872-006	DIODE
CR2706	164717	1471872-006	DIODE
CR2802	164717	1471872-006	DIODE
CR2901	164717	1471872-006	DIODE
CR2903	164717	1471872-006	DIODE
CR2907	164717	1471872-006	DIODE
CR2908	164717	1471872-006	DIODE
CR3101	176746	99201-210	DIODE ZENER 5.6V .4W (SEE NOTE@)
CR3101	215488	XX11073-650	DIODE ZENER 5.6V .5W (SEE NOTE@)
CR3102	164717	1471872-006	DIODE
CR3103	164717	1471872-006	DIODE
CR3301	164717	1471872-006	DIODE
CR3302	164717	1471872-006	DIODE
CR3601	200155	99201-328	DIODE ZENER 33V .4W (SEE NOTE@)
CR3601	215489	XX80442-730	DIODE ZENER 33V .5W (SEE NOTE@)
CR4001	147015	2811925-002	DIODE
CR4002	147015	2811925-002	DIODE
CR4003	147015	2811925-002	DIODE
CR4004	147015	2811925-002	DIODE
CR4101	207878	2820546-002	DIODE
CR4102	164717	1471872-006	DIODE
CR4105	207878	XX60341-800	DIODE
CR4106	176296	1476171-031	DIODE

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
CR4111	202055	1F05008-25A	* DIODE B+ REG KIT
CR4112	164874	1471872-010	DIODE
CR4115	136634	99201-219	DIODE ZENER 13V .4W
CR4116	200157	2820545-007	DIODE
CR4117	176296	1476171-031	* DIODE
CR4118	164590	2820545-002	DIODE
CR4119	164590	2820545-002	DIODE
CR4120	164590	2820545-002	DIODE
CR4121	136634	99201-219	DIODE ZENER 13V .4W
CR4122	200158	99202-103	DIODE ZENER 3V 1W
CR4123	176746	99201-210	DIODE ZENER 5.6V .4W
CR4302	164717	1471872-006	DIODE
CR4303	161871	99201-214	DIODE ZENER 8.2V .4W (SEE NOTE@)
CR4303	228429	XX11073-660	DIODE ZENER 8.2V .5W (SEE NOTE@)
CR4304	164717	1471872-006	DIODE
CR4305	164717	1471872-006	DIODE
CR4401	198596	XX44001-602	DIODE
CR4402	164589	2820545-005	DIODE
CR4403	139706	1471872-008	DIODE
CR4404	164717	1471872-006	DIODE
CR4501	164717	1471872-006	DIODE
CR4502	139706	1471872-008	DIODE
CR4503	129938	99201-211	DIODE ZENER 6.2V .4W
CR4504	164589	2820545-004	DIODE
CR4511	164717	1471872-006	DIODE
CR4512	192848	99201-215	DIODE ZENER 9.1V .4W
CR4513	164717	1471872-006	DIODE
CR4515	157301	1471872-024	DIODE
CR4516	164717	1471872-006	DIODE
CR4606	161081	99201-310	DIODE ZENER 5.6V .4W (SEE NOTE@)
CR4606	226504	XX70438-200	DIODE ZENER 5.6V .5W (SEE NOTE@)
CR4701	176296	1476171-031	DIODE
CR4702	153672	1476171-044	DIODE
CR4705	176296	1476171-031	DIODE
CR4709	196062	2820500-001	DIODE
CR4710	139706	1471872-008	DIODE
CR4712	209741	99201-314	DIODE ZENER 8.2V .4W
CR4713	153672	1476171-044	DIODE
CR4803	176296	1476171-031	DIODE
CR4805	138974	99201-208	DIODE ZENER 4.7V .4W
CR4806	164717	1471872-006	DIODE
CR4901	157301	1471872-024	* DIODE
CR4902	159429	1497049-006	* DIODE ZENER 10V .2W
DL2601	193568	1C68110-01A	DELAY LINE
DL2701	206397	2821744-05A	DELAY LINE
F4001	175425	2821524-118	* FUSE 5A 125V
FB4101	152102	2843117-001	BEAD
FB4102	152102	2843117-001	BEAD
FB4103	153328	2843165-004	BEAD
FB4301	152103	2843117-002	BEAD
FB4302	152103	2843117-002	BEAD
FB4401	204792	1Z02001-01A	COIL
FB4402	206390	2843117-012	BEAD
FL4001	207879	2G45002-522	* FILTER AC LINE
J1401	190514	1P21002-41A	JACK PHONO VID IN 1 CTC169PA,PB,PC
J1401	203741	1P21011-04A	JACK PHONO VID IN 1 CTC169PD
J1402	190514	1P21002-41A	JACK PHONO VID IN 2 CTC169PA,PB,PC
J1402	203741	1P21011-04A	JACK PHONO VID IN 2 CTC169PD
J1403	203741	1P21011-04A	JACK PHONO SEL VID OUT
J1404	195705	1P24004-01A	SOCKET SVHS
J3001	200160	XX10005-030	CONNECTOR 10 PIN FPA
J4901	190476	1466404-320	* CONNECTOR XRP TEST
JC111	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC112	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC302	181161	93697-005	RES CMF 1/8W 5% .05R
JC303	181161	93697-005	RES CMF 1/8W 5% .05R
JC304	181161	93697-005	RES CMF 1/8W 5% .05R
JC306	181161	93697-005	RES CMF 1/8W 5% .05R
JC402	181161	93697-005	RES CMF 1/8W 5% .05R
JC403	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC404	181161	93697-005	RES CMF 1/8W 5% .05R
JC405	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC406	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC407	181161	93697-005	RES CMF 1/8W 5% .05R
JC408	181161	93697-005	RES CMF 1/8W 5% .05R
JC409	181161	93697-005	RES CMF 1/8W 5% .05R
JC410	181161	93697-005	RES CMF 1/8W 5% .05R
JC411	181161	93697-005	RES CMF 1/8W 5% .05R
JC412	181161	93697-005	RES CMF 1/8W 5% .05R
JC413	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC414	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC415	181161	93697-005	RES CMF 1/8W 5% .05R
JC416	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC422	181161	93697-005	RES CMF 1/8W 5% .05R
JC425	181161	93697-005	RES CMF 1/8W 5% .05R
JC426	181161	93697-005	RES CMF 1/8W 5% .05R
JC427	181161	93697-005	RES CMF 1/8W 5% .05R
JC428	181161	93697-005	RES CMF 1/8W 5% .05R
JC429	181161	93697-005	RES CMF 1/8W 5% .05R
JC430	181161	93697-005	RES CMF 1/8W 5% .05R
JC431	181161	93697-005	RES CMF 1/8W 5% .05R
JC432	181161	93697-005	RES CMF 1/8W 5% .05R
JC445	181161	93697-005	RES CMF 1/8W 5% .05R
JC446	181161	93697-005	RES CMF 1/8W 5% .05R
JC447	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC448	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC449	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC450	181161	93697-005	RES CMF 1/8W 5% .05R
JC451	181161	93697-005	RES CMF 1/8W 5% .05R
JC452	181161	93697-005	RES CMF 1/8W 5% .05R
JC453	205408	XX80440-510	RES CMF 1/10W 10% .0R
L1201	190504	1C55100-02B	COIL 4.5UH
L2301	195708	1C51108-68A	COIL .68UH
L2302	197616	1C51109-22A	COIL 2.2UH
L2303	190506	1C55100-05B	COIL
L2304	190503	1C55100-01B	COIL
L2305	197616	1C51109-22A	COIL 2.2UH
L2306	206035	1471986-037	COIL
L2307	210687	1C51100-12A	COIL 12UH
L2601	216800	1C55100-11A	COIL ADJ
L2602	195710	1C51100-39A	COIL 39UH
L2603	160518	1C51100-10A	COIL 10UH
L2604	158726	2873607-121	COIL 4.7UH
L2702	195710	1C51100-39A	COIL 39UH
L2704	195750	1C51111-12A	COIL
L2705	158726	2873607-121	* COIL 4.7UH
L2706	175409	2873607-125	COIL 10UH
L2801	195712	1C51100-22A	COIL 22UH
L2802	195712	1C51100-22A	COIL 22UH
L2803	195712	1C51100-22A	COIL 22UH
L2804	200161	1C51100-33A	COIL
L3101	175409	2873607-125	COIL 10UH
L3601	161243	1C51101-10A	* COIL 100UH
L3602	207880	XX60245-200	COIL
L4101	190480	1497050-012	COIL 2.2UH
L4401	196064	1C51400-04A	* COIL
L4701	190729	2873607-133	COIL 47UH
L4702	175409	2873607-125	COIL 10UH
L4803	206391	2G32005-503	* COIL
Q1201	215495	XX11070-770	TRANSISTOR AUDIO BUFF
Q1401	215496	XX30946-660	TRANSISTOR VIDEO AMP
Q1402	215495	XX11070-770	TRANSISTOR VIDEO AMP
Q1403	143806	1417347-004	TRANSISTOR VIDEO BUFF
Q1404	215495	XX11070-770	TRANSISTOR CHROMA AMP
Q1405	215495	XX11070-770	TRANSISTOR CHROMA BUFF
Q1406	215495	XX11070-770	TRANSISTOR VIDEO BUFF
Q2301	146848	1417405-002	TRANSISTOR IF PREAMP
Q2302	215495	XX11070-770	TRANSISTOR AUDIO IF AMP
Q2701	215495	XX11070-770	TRANSISTOR VIDEO AMP
Q2702	146847	1417306-013	TRANSISTOR VIDEO AMP
Q2703	143806	1417347-004	TRANSISTOR BEAM LIMIT
Q2704	146847	1417306-013	TRANSISTOR HI APL LIMIT
Q2705	145410	1417330-011	TRANSISTOR HI APL LIMIT
Q2707	215495	XX11070-770	TRANSISTOR LUMA BUFFER
Q2709	215495	XX11070-770	TRANSISTOR CLAMP
Q2903	176980	1417309-006	TRANSISTOR RED DRIVER
Q2904	176980	1417309-006	TRANSISTOR BLU DRIVER
Q2905	176980	1417309-006	TRANSISTOR GRN DRIVER

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
Q2906	143806	1417347-004	TRANSISTOR LUMA BUFFER
Q2908	176980	1417309-006	TRANSISTOR RED OSD
Q2909	176980	1417309-006	TRANSISTOR BLU OSD
Q2910	176980	1417309-006	TRANSISTOR GRN OSD
Q2911	215495	XX11070-770	TRANSISTOR -Y BUFFER
Q2912	219412	XX15047-510	TRANSISTOR HORIZ BLANK BUFFER
Q3101	215496	XX30946-660	TRANSISTOR STBY SENSE
Q3102	215495	XX11070-770	TRANSISTOR RESET
Q3301	145410	1417330-011	TRANSISTOR SYNC SEP
Q3302	215495	XX11070-770	TRANSISTOR BLANKING SW
Q3303	215495	XX11070-770	TRANSISTOR CLAMP
Q3304	215496	XX30946-660	TRANSISTOR CLOSED CAPTION BUFFER
Q4101	200165	XX10778-600	TRANSISTOR REGULATOR OUT
Q4105	143802	1417330-010	TRANSISTOR ERROR AMP
Q4106	143802	1417330-010	TRANSISTOR PWM GENER
Q4107	146847	1417306-013	TRANSISTOR PWM AMP
Q4109	146847	1417306-013	TRANSISTOR ERROR AMP
Q4111	215496	XX30946-660	TRANSISTOR CLAMP
Q4301	146847	1417306-013	TRANSISTOR ON/OFF SW
Q4302	200168	XX10905-400	TRANSISTOR HORIZ BUFF
Q4304	146847	1417306-013	TRANSISTOR ON/OFF BUFF
Q4305	215495	XX11070-770	TRANSISTOR ON/OFF BUFF
Q4306	215495	XX11070-770	TRANSISTOR ON/OFF BUFF
Q4401	200167	XX30792-600	TRANSISTOR HORIZ OUT
Q4402	215495	XX11070-770	TRANSISTOR HORIZ SYNC
Q4505	146847	1417306-013	TRANSISTOR V RAMP RESET
Q4506	148970	1417419-001	TRANSISTOR V RAMP LIMIT
Q4507	146847	1417306-013	TRANSISTOR V SYNC KILL
Q4601	146847	1417306-013	TRANSISTOR 5V STBY
Q4702	157627	1417364-003	TRANSISTOR 12V RUN
Q4703	157627	1417364-003	TRANSISTOR 5V RUN
Q4704	157627	1417364-003	TRANSISTOR 9V RUN
Q4705	146847	1417306-013	TRANSISTOR ON/OFF BUFF
Q4801	215496	XX30946-660	TRANSISTOR V PIN
Q4802	200168	XX10905-400	TRANSISTOR V PIN
Q4803	146847	1417306-013	TRANSISTOR V PIN
Q4804	215495	XX11070-770	TRANSISTOR PINCUSHION
Q4901	147665	1417406-003 *	TRANSISTOR XRP
R1201	174366	93697-427	RES CMF 1/8W 5% 18K
R1203	182628	93697-689	RES CMF 1/8W 2% 470R
R1204	181113	2821716-502	RES CONTROL BRT LEVEL
R1401	181066	93697-371	RES CMF 1/8W 5% 82R
R1402	829143	993230-688 *	RES CF 1/4W 2% 430R
R1403	194917	1B14202-30A	RES CMF 1/10W 2% 3K
R1404	190464	93697-708	RES CMF 1/8W 2% 3K
R1405	181066	93697-371	RES CMF 1/8W 5% 82R
R1406	829143	993230-688 *	RES CF 1/4W 2% 430R
R1408	173964	93697-372	RES CMF 1/8W 5% 91R
R1409	190462	93697-697	RES CMF 1/8W 2% 1K
R1410	829143	993230-688 *	RES CF 1/4W 2% 430R
R1411	194917	1B14202-30A	RES CMF 1/10W 2% 3K
R1412	202586	1B14202-11A	RES CMF 1/10W 2% 1.1K
R1413	181488	93697-685	RES CMF 1/8W 2% 330R
R1414	175321	2819434-704	RES CF 1/4W 2% 2K
R1416	181063	93697-370	RES CMF 1/8W 5% 75R
R1417	174364	93697-721	RES CMF 1/8W 2% 10K
R1418	175417	2819434-414	RES CF 1/4W 5% 5.1K
R1419	205291	XX11064-950	RES CMF 1/8W 2% 910R
R1420	182823	93697-700	RES CMF 1/8W 2% 1.3K
R1421	202585	1B14201-51A	RES CMF 1/10W 2% 510R
R1422	202586	1B14202-11A	RES CMF 1/10W 2% 1.1K CTC169PA,PC,PD
R1422	192100	1B14212-10A	RES CMF 1/10W 5% 1K CTC169PB
R1423	177535	2819434-387	RES CF 1/4W 5% 390R
R1424	159061	93697-369	RES CMF 1/8W 5% 68R
R1425	180816	93697-747	RES CMF 1/8W 2% 120K
R1426	182628	93697-689	RES CMF 1/8W 2% 470R
R1427	181482	93697-701	RES CMF 1/8W 2% 1.5K
R1428	181488	93697-685	RES CMF 1/8W 2% 330R
R1429	192081	1B14212-27A	RES CMF 1/10W 5% 2.7K
R1430	176648	2819434-707	RES CF 1/4W 2% 2.7K
R1431	175418	93697-414	RES CMF 1/8W 5% 5.1K CTC169PA,PD
R1431	181080	93697-409	RES CMF 1/8W 5% 3.3K CTC169PB,PC
R1432	829010	993272-349 *	RES CFFP 1/4W 5% 10R
R1433	197903	1B14212-18A	RES CMF 1/10W 5% 1.8K
R1434	176818	93697-373	RES CMF 1/8W 5% 100R

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R2301	175325	2819434-373 *	RES CF 1/4W 5% 100R
R2302	181482	93697-701	RES CMF 1/8W 2% 1.5K
R2303	178284	93697-687	RES CMF 1/8W 2% 390R
R2304	175741	93697-349	RES CMF 1/8W 5% 10R
R2305	159061	93697-369	RES CMF 1/8W 5% 68R
R2306	181486	93697-673	RES CMF 1/8W 2% 100R
R2307	181493	93697-692	RES CMF 1/8W 2% 620R
R2308	176367	93697-365	RES CMF 1/8W 5% 47R
R2309	178299	93697-415	RES CMF 1/8W 5% 5.6K
R2310	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R2311	181107	2821716-103	RES CONTROL RF AGC (SEE NOTE@)
R2311	189853	XX90574-630	RES CONTROL RF AGC (SEE NOTE@)
R2311	181113	XX11066-940	RES CONTROL RF AGC (SEE NOTE@)
R2312	193061	93697-431	RES CMF 1/8W 5% 27K
R2313	174355	93697-441	RES CMF 1/8W 5% 68K
R2314	207835	1B14214-18A	RES CMF 1/10W 5% 180K
R2315	192082	1B14212-15A	RES CMF 1/10W 5% 1.5K
R2317	205336	1B14211-30A	RES CMF 1/10W 5% 300R
R2318	201140	1B14211-24A	RES CMF 1/10W 5% 240R
R2319	179955	2819434-435	RES CF 1/4W 5% 39K
R2320	181486	93697-673	RES CMF 1/8W 2% 100R
R2321	175321	2819434-404	RES CF 1/4W 5% 2K
R2322	218508	XX70434-200	RES CMF 1/10W 5% 100R
R2323	200172	993272-327 *	RES CF 1/4W 5% 1.2R
R2324	175045	2819434-385	RES CF 1/4W 5% 330R
R2325	192080	1B14210-22A	RES CMF 1/10W 5% 22R
R2326	205346	1B14212-56A	RES CMF 1/10W 5% 5.6K
R2601	192086	1B14211-15A	RES CMF 1/10W 5% 150R
R2602	190460	93697-682	RES CMF 1/8W 2% 240R
R2603	181112	2821716-501	RES CONTROL NOTCH DEPTH
R2604	182823	93697-700	RES CMF 1/8W 2% 1.3K
R2605	175354	2819434-384	RES CF 1/4W 5% 300R
R2606	181056	93697-694	RES CMF 1/8W 2% 750R
R2607	174348	93697-397	RES CMF 1/8W 5% 1K (SEE NOTE@)
R2607	181069	XX11064-740	RES CMF 1/8W 5% 820R (SEE NOTE@)
R2608	830B68	2821523-321 *	RES MFFP 1/2W 5% .68R
R2609	218508	XX70434-200	RES CMF 1/10W 5% 100R
R2701	218508	XX70434-200	RES CMF 1/10W 5% 100R
R2702	176979	2819434-382	RES CF 1/4W 5% 240R
R2703	174350	93697-413	RES CMF 1/8W 5% 4.7K
R2704	181071	93697-406	RES CMF 1/8W 5% 2.4K
R2705	175055	2819434-397	RES CF 1/4W 5% 1K
R2706	174364	93697-721	RES CMF 1/8W 2% 10K
R2707	200174	1B14214-20A	RES CMF 1/10W 5% 200K
R2708	175367	2819434-701	RES CF 1/4W 5% 1.5K
R2709	174349	93697-407	RES CMF 1/8W 5% 2.7K
R2710	181486	93697-673	RES CMF 1/8W 2% 100R
R2711	182628	93697-689	RES CMF 1/8W 2% 470R
R2712	178299	93697-415	RES CMF 1/8W 5% 5.6K
R2713	205291	XX11064-950	RES CMF 1/8W 2% 910R
R2714	176816	93697-445	RES CMF 1/8W 5% 100K
R2715	181055	93697-384	RES CMF 1/8W 5% 300R
R2716	190462	93697-697	RES CMF 1/8W 2% 1K
R2718	175890	2819434-411	RES CF 1/4W 5% 3.9K
R2719	157214	990401-416	RES MF 1/4W 1% 14.3K
R2720	175055	2819434-397	RES CF 1/4W 5% 1K
R2721	206037	993153-193 *	RES CC 1/2W 5% 27K
R2722	192081	1B14212-27A	RES CMF 1/10W 5% 2.7K
R2723	176648	2819434-407	RES CF 1/4W 5% 2.7K
R2724	175317	2819434-421	RES CF 1/4W 5% 10K
R2725	202914	1B14201-75A	RES CMF 1/10W 2% 750R
R2726	176814	93697-395	RES CMF 1/8W 5% 820R
R2727	176816	93697-445	RES CMF 1/8W 5% 100K
R2729	178281	93697-417	RES CMF 1/8W 5% 6.8K
R2730	181109	2821716-202	RES CONTROL CONT PRESET
R2731	181071	93697-406	RES CMF 1/8W 5% 2.4K
R2732	181482	93697-701	RES CMF 1/8W 2% 1.5K
R2733	181493	93697-692	RES CMF 1/8W 2% 620R
R2734	182822	93697-691	RES CMF 1/8W 2% 560R
R2736	178286	93697-693	RES CMF 1/8W 2% 680R
R2739	175325	2819434-373	RES CF 1/4W 5% 100R
R2740	182822	93697-691	RES CMF 1/8W 2% 560R
R2741	192082	1B14212-15A	RES CMF 1/10W 5% 1.5K
R2742	181482	93697-701	RES CMF 1/8W 2% 1.5K
R2801	190462	93697-697	RES CMF 1/8W 2% 1K
R2802	177366	2821716-303	RES CONTROL CHR FIL
R2803	174368	93697-432	RES CMF 1/8W 5% 30K

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R2804	180816	93697-747	RES CMF 1/8W 2% 120K
R2805	181080	93697-409	RES CMF 1/8W 5% 3.3K
R2806	174363	93697-479	RES CMF 1/8W 5% 2.7M
R2809	181051	93697-402	RES CMF 1/8W 5% 1.6K
R2810	181051	93697-402	RES CMF 1/8W 5% 1.6K
R2811	181051	93697-402	RES CMF 1/8W 5% 1.6K
R2812	174366	93697-427	RES CMF 1/8W 5% 18K
R2813	174367	93697-729	RES CMF 1/8W 2% 22K
R2814	200176	1B14203-30A	RES CMF 1/10W 2% 30K
R2815	174360	93697-454	RES CMF 1/8W 5% 240K
R2816	181107	2821716-103	RES CONTROL TINT PRESET
R2817	200177	1B14211-27A	RES CMF 1/10W 5% 270R
R2901	190462	93697-697	RES CMF 1/8W 2% 1K
R2902	190462	93697-697	RES CMF 1/8W 2% 1K
R2903	190462	93697-697	RES CMF 1/8W 2% 1K
R2908	175308	2819434-399	RES CF 1/4W 5% 1.2K
R2910	181492	93697-681	RES CMF 1/8W 2% 220R
R2911	176366	93697-405	RES CMF 1/8W 5% 2.2K
R2912	180325	93697-428	RES CMF 1/8W 5% 20K
R2913	190533	2821761-452	RES CONTROL RED BIAS
R2914	181492	93697-681	RES CMF 1/8W 2% 220R
R2915	192096	1B14212-22A	RES CMF 1/10W 5% 2.2K
R2916	180325	93697-428	RES CMF 1/8W 5% 20K
R2917	190533	2821761-452	RES CONTROL BLU BIAS
R2918	181492	93697-681	RES CMF 1/8W 2% 220R
R2919	176366	93697-405	RES CMF 1/8W 5% 2.2K
R2920	180325	93697-428	RES CMF 1/8W 5% 20K
R2921	190533	2821761-452	RES CONTROL GRN BIAS
R2922	181492	93697-681	RES CMF 1/8W 2% 220R
R2923	181491	93697-379	RES CMF 1/8W 5% 180R
R2924	829010	727832-111	* RES CC 1/4W 5% 10R
R2925	181486	93697-673	RES CMF 1/8W 2% 100R
R2926	190531	2821761-101	RES CONTROL RED/BLU DR
R2927	829027	2819434-359	RES CF 1/4W 5% 27R
R2928	190531	2821761-101	RES CONTROL GRN DRIVE
R2929	158491	93697-361	RES CMF 1/8W 5% 33R
R2930	176629	2819434-391	RES CF 1/4W 5% 560R
R2935	190461	93697-688	RES CMF 1/8W 2% 430R
R2938	174344	93697-383	RES CMF 1/8W 5% 270R
R2941	175363	2819434-680	RES CF 1/4W 2% 200R
R2942	162003	93697-393	RES CMF 1/8W 5% 680R
R2943	162003	93697-393	RES CMF 1/8W 5% 680R
R2944	181057	93697-698	RES CMF 1/8W 2% 1.1K
R2945	174344	93697-383	RES CMF 1/8W 5% 270R
R2946	190462	93697-697	RES CMF 1/8W 2% 1K
R2947	829010	993272-349	* RES CFFP 1/4W 5% 10R
R2948	200186	2819434-349	RES CF 1/4W 5% 10R
R2949	174345	93697-387	RES CMF 1/8W 5% 390R
R3101	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3102	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3103	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R3104	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3105	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R3106	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3107	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3108	174361	93697-469	RES CMF 1/8W 5% 1M
R3109	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3110	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3111	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3112	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3113	174350	93697-413	RES CMF 1/8W 5% 4.7K
R3114	205349	1B14212-82A	RES CMF 1/10W 5% 8.2K
R3115	174364	93697-721	RES CMF 1/8W 2% 10K
R3116	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3117	174364	93697-721	RES CMF 1/8W 2% 10K
R3118	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3119	175312	2819434-393	RES CF 1/4W 5% 680R
R3120	182822	93697-691	RES CMF 1/8W 2% 560R
R3121	174364	93697-721	RES CMF 1/8W 2% 10K
R3122	192070	1B14213-22A	RES CMF 1/10W 5% 22K
R3123	175055	2819434-397	RES CF 1/4W 5% 1K
R3125	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3126	192097	1B14212-47A	RES CMF 1/10W 5% 4.7K
R3128	197472	1B14211-56A	RES CMF 1/10W 5% 560R
R3129	197644	1B14211-82A	RES CMF 1/10W 5% 820R
R3130	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3131	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R3132	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R3135	176816	93697-445	RES CMF 1/8W 5% 100K
R3136	174364	93697-721	RES CMF 1/8W 2% 10K
R3138	174367	93697-729	RES CMF 1/8W 2% 22K
R3139	175055	2819434-397	RES CF 1/4W 5% 1K
R3140	175055	2819434-397	RES CF 1/4W 5% 1K
R3141	181486	93697-673	RES CMF 1/8W 2% 100R
R3142	176816	93697-445	RES CMF 1/8W 5% 100K
R3143	190462	93697-697	RES CMF 1/8W 2% 1K
R3201	218508	XX70434-200	RES CMF 1/10W 5% 100R
R3301	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3302	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3303	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3304	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3305	174364	93697-721	RES CMF 1/8W 2% 10K
R3306	197633	1B14213-47A	RES CMF 1/10W 5% 47K
R3307	205245	1B14203-27A	RES CMF 1/10W 2% 27K
R3308	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3309	200178	93697-718	RES CMF 1/8W 2% 7.5K
R3310	175040	2819434-365	* RES CF 1/4W 5% 47R
R3312	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3313	192097	1B14212-47A	RES CMF 1/10W 5% 4.7K
R3314	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3317	175322	2819434-437	RES CF 1/4W 5% 47K
R3318	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3319	175046	2819434-432	RES CF 1/4W 5% 330R
R3320	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3321	179316	2819434-416	RES CF 1/4W 5% 6.2K
R3324	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3325	192097	1B14212-47A	RES CMF 1/10W 5% 4.7K
R3326	174350	93697-413	RES CMF 1/8W 5% 4.7K
R3327	174363	93697-479	RES CMF 1/8W 5% 2.7M
R3329	175055	2819434-397	RES CF 1/4W 5% 1K
R3330	175360	2819434-425	RES CF 1/4W 5% 15K
R3331	174348	93697-397	RES CMF 1/8W 5% 1K
R3332	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3333	193886	2819434-436	RES CF 1/4W 5% 43K
R3334	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R3335	205353	1B14203-13A	RES CMF 1/10W 2% 13K
R3336	175413	2819434-413	RES CF 1/4W 5% 4.7K
R3338	175046	2819434-432	RES CF 1/4W 5% 330R
R3339	175055	2819434-397	RES CF 1/4W 5% 1K
R3340	197643	1B14212-91A	RES CMF 1/10W 5% 9.1K
R3341	162005	93697-442	RES CMF 1/8W 5% 75K
R3342	200180	1B14203-91A	RES CMF 1/10W 2% 91K
R3343	178285	93697-724	RES CMF 1/8W 2% 13K
R3344	174365	93697-423	RES CMF 1/8W 5% 12K
R3345	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3346	200181	2821716-152	RES CONTROL SUB-BRITE
R3347	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3348	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3349	175055	2819434-397	RES CF 1/4W 5% 1K
R3351	181062	93697-438	RES CMF 1/8W 5% 51K
R3352	175317	2819434-421	RES CF 1/4W 5% 10K
R3353	176648	2819434-407	RES CF 1/4W 5% 2.7K
R3601	175317	2819434-421	RES CF 1/4W 5% 10K
R3602	174364	93697-721	RES CMF 1/8W 2% 10K
R3603	181491	93697-379	RES CMF 1/8W 5% 180R
R3604	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3605	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R4001	200444	1B08739-18A	RES WW 15W 10% 1.8R
R4002	183127	2817488-003	* RES CF 1/2W 5% 2.7M
R4003	200182	2874125-433	RES MF 2W 5% 33K
R4101	175054	2819434-429	RES CF 1/4W 5% 22K
R4102	175413	2819434-713	RES CF 1/4W 2% 4.7K
R4103	175315	2819434-438	* RES CF 1/4W 5% 51K
R4104	175367	2819434-701	RES CF 1/4W 2% 1.5K
R4105	179238	2819434-442	RES CF 1/4W 5% 75K
R4107	175374	2819435-357	RES CF 1/2W 5% 22R
R4108	203097	2819434-696	RES CF 1/4W 2% 910R
R4109	203745	2819434-700	RES CF 1/4W 2% 1.3K CTC169PA,PD
R4109	175055	2819434-397	RES CF 1/4W 5% 1K CTC169PB,PC
R4110	200183	1B08228-18A	R RES WW 2W 5% .18R
R4113	190525	2821716-301	RES CONTROL STBY ADJ
R4114	176506	990401-464	RES MF 1/4W 1% 45.3K
R4115	200184	990401-350	RES MF 1/4W 1% 3240R
R4116			* RES CONTROL PART OF CR4111 B+ REG KIT
R4117	175040	2819434-365	RES CF 1/4W 5% 47R
R4119	200185	1B08521-33A	* RES WW 7W 5% 330R
R4120	200186	2819434-649	RES CF 1/4W 2% 10R
R4125	176796	2819435-373	RES CF 1/2W 5% 100R
R4126	206016	1B08329-68A	* RES WW 3W 5% 6.8R
R4127	175367	2819434-401	RES CF 1/4W 5% 1.5K
R4128	177535	2819434-387	RES CF 1/4W 5% 390R

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.		DESCRIPTION
R4129	180369	93697-404		RES CMF 1/8W 5% 2K
R4135	175317	2819434-421		RES CF 1/4W 5% 10K
R4136	175308	2819434-399		RES CF 1/4W 5% 1.2K
R4137	175055	2819434-397		RES CF 1/4W 5% 1K
R4139	174364	93697-721		RES CMF 1/8W 2% 10K
R4140	181494	93697-443		RES CMF 1/8W 5% 82K
R4142	175042	2819434-405		RES CF 1/4W 5% 2.2K
R4143	175042	2819434-405		RES CF 1/4W 5% 2.2K
R4144	175373	2819435-403		RES CF 1/2W 5% 1.8K
R4145	174364	93697-721		RES CMF 1/8W 2% 10K
R4146	174350	93697-413		RES CMF 1/8W 5% 4.7K
R4147	179259	2874124-429		RES MFFP 1W 5% 22K
R4148	200189	990401-471		RES MF 1/4W 1% 53.6K
R4149	831A12	2874124-327	*	RES MFFP 1W 5% 1.2R
R4150	174340	93697-357		RES CMF 1/8W 5% 22R
R4151	176814	93697-395		RES CMF 1/8W 5% 820R
R4152	182628	93697-689		RES CMF 1/8W 2% 470R
R4302	181496	93697-416		RES CMF 1/8W 5% 6.2K
R4303	194914	1B14211-33A		RES CMF 1/10W 5% 330R
R4306	200417	2821761-153		RES CONTROL CENTERING
R4307	175046	2819434-732		RES CF 1/4W 2% 330R
R4308	181485	93697-375		RES CMF 1/8W 2% 120R
R4309	175325	2819434-373		RES CF 1/4W 5% 100R
R4310	179798	2819435-395		RES CF 1/2W 5% 820R
R4311	175363	2819434-680		RES CF 1/4W 2% 200R
R4312	175040	2819434-365	*	RES CF 1/4W 5% 47R
R4313	176796	2819435-373		RES CF 1/2W 5% 100R
R4314	200192	2819435-363	*	RES CF 1/2W 5% 39R
R4315	191146	2819435-419		RES CF 1/2W 5% 8.2K
R4317	177535	2819434-387		RES CF 1/4W 5% 390R
R4318	181491	93697-379		RES CMF 1/8W 5% 180R
R4319	175325	2819434-373		RES CF 1/4W 5% 100R (SEE NOTE@)
R4319	175324	XX20469-450		RES CF 1/4W 2% 220R (SEE NOTE@)
R4321	175044	2819434-445		RES CF 1/4W 5% 100K
R4322	218508	XX70434-200		RES CMF 1/10W 5% 100R
R4323	175363	2819434-680		RES CF 1/4W 2% 200R
R4324	175418	93697-714		RES CMF 1/8W 2% 5.1K
R4326	195938	1B14202-33A		RES CMF 1/10W 2% 330R
R4327	175360	2819434-725		RES CF 1/4W 2% 15K
R4328	175418	93697-714		RES CMF 1/8W 2% 5.1K
R4401	176651	2819435-381	*	RES CF 1/2W 5% 220R
R4402	181098	2819435-349	*	RES CF 1/2W 5% 10R
R4404	175364	2819435-393		RES CF 1/2W 5% 680R
R4406	175364	2819435-393		RES CF 1/2W 5% 680R
R4407	175413	2819434-413		RES CF 1/4W 5% 4.7K
R4408	175417	2819434-414		RES CF 1/4W 5% 5.1K
R4409	175042	2819434-405		RES CF 1/4W 5% 2.2K
R4501	175413	2819434-713		RES CF 1/4W 2% 4.7K
R4503	178299	93697-415		RES CMF 1/8W 5% 5.6K
R4504	175312	2819434-393		RES CF 1/4W 5% 680R
R4505	200445	993291-330		RES MF 1/2W 5% 1.6R
R4506	200194	2819435-390		RES CF 1/2W 5% 510R
R4507	177816	2819434-459		RES CF 1/4W 5% 390K
R4508	179955	2819434-435		RES CF 1/4W 5% 39K
R4509	174364	93697-721		RES CMF 1/8W 2% 10K
R4510	174364	93697-721		RES CMF 1/8W 2% 10K
R4511	181065	93697-719		RES CMF 1/8W 2% 8.2K
R4512	181484	93697-403		RES CMF 1/8W 5% 1.8K
R4513	181485	93697-375		RES CMF 1/8W 2% 120R
R4514	181062	93697-438		RES CMF 1/8W 5% 51K
R4515	205346	1B14212-56A		RES CMF 1/10W 5% 5.6K
R4516	175306	2819434-441		RES CF 1/4W 5% 68K
R4517	175055	2819434-397		RES CF 1/4W 5% 1K
R4518	829147	993272-389	*	RES CFFP 1/4W 5% 470R
R4519	176793	2819435-389		RES CF 1/2W 5% 470R
R4520	179248	2819435-417	*	RES CF 1/2W 5% 6.8K
R4521	181060	93697-426		RES CMF 1/8W 5% 16K
R4522	200417	2821761-153		RES CONTROL VERT HEIGHT
R4523	200446	2874124-408	*	RES MF 1W 5% 3K
R4524	197633	1B14213-47A		RES CMF 1/10W 5% 47K
R4525	174366	93697-427		RES CMF 1/8W 5% 18K
R4526	200178	93697-718		RES CMF 1/8W 2% 7.5K
R4539	181494	93697-443		RES CMF 1/8W 5% 82K
R4542	204315	2819435-414		RES CF 1/2W 5% 5.1K
R4543	181075	93697-461		RES CMF 1/8W 5% 470K
R4544	200197	993272-341	*	RES CFFP 1/4W 5% 4.7R
R4545	181490	93697-753		RES CMF 1/8W 2% 220K
R4546	174355	93697-441		RES CMF 1/8W 5% 68K
R4547	192084	XX50886-630		RES CMF 1/10W 5% 100K
R4548	224267	2819435-401		RES CF 1/2W 5% 1.5K

SYMBOL NO.	STOCK NO.	DRAWING NO.		DESCRIPTION
R4602	175312	2819434-393		RES CF 1/4W 5% 680R
R4604	176457	2819434-469		RES CF 1/4W 5% 1M
R4701	830010	993273-349	*	RES CFFP 1/2W 5% 10R
R4703	195730	1B08329-33A	*	RES WW 3W 5% 3.3R
R4705	176647	2819434-392		RES CF 1/4W 5% 620R
R4710	829012	993272-351	*	RES CFFP 1/4W 2% 12R
R4711	175354	2819434-384		RES CF 1/4W 5% 300R
R4712	175314	2819434-433		RES CF 1/4W 5% 33K
R4713	830368	993114-569	*	RES CFFP 1/2W 2% 68K
R4714	175325	2819434-373		RES CF 1/4W 5% 100R
R4715	175363	2819434-680		RES CF 1/4W 2% 200R
R4716	175312	2819434-693		RES CF 1/4W 2% 680R
R4717	175318	2819434-667		RES CF 1/4W 2% 56R
R4718	181486	93697-673		RES CMF 1/8W 2% 100R
R4719	830147	993273-389	*	RES CFFP 1/2W 5% 470R
R4720	830010	993273-349	*	RES CFFP 1/2W 5% 10R
R4802	200199	2821761-202		RES CONTROL WIDTH
R4803	176816	93697-445		RES CMF 1/8W 5% 100K
R4804	174355	93697-441		RES CMF 1/8W 5% 68K
R4805	181107	2821716-103		RES CONTROL E/W PIN AMP
R4806	176648	2819434-407		RES CF 1/4W 5% 2.7K
R4807	179955	2819434-435		RES CF 1/4W 5% 39K
R4808	181484	93697-403		RES CMF 1/8W 5% 1.8K
R4809	175769	2819435-387	*	RES CF 1/2W 5% 390R
R4810	177535	2819434-387		RES CF 1/4W 5% 390R
R4812	200178	93697-718		RES CMF 1/8W 2% 7.5K
R4813	180325	93697-428		RES CMF 1/8W 5% 20K
R4814	180369	93697-404		RES CMF 1/8W 5% 2K
R4815	178299	93697-415		RES CMF 1/8W 5% 5.6K
R4817	176668	2819434-461		RES CF 1/4W 5% 470K
R4818	200200	2874124-406		RES MF 1W 5% 2.4K
R4819	179238	2819434-442		RES CF 1/4W 5% 75K
R4821	175784	2874124-377	*	RES MFFP 1W 5% 150R
R4822	205354	1B14203-15A		RES CMF 1/10W 2% 15K
R4823	205408	1B14229-00A		RES CMF 1/10W .0R
R4824	205376	1B14204-30A		RES CMF 1/10W 2% 300K
R4825	197471	1B14213-68A		RES CMF 1/10W 5% 68K
R4826	192097	XX30944-310		RES CMF 1/10W 5% 4.7K
R4901	175317	2819434-421	*	RES CF 1/4W 5% 10K
R4902	175325	2819434-373	*	RES CF 1/4W 5% 100R
R4903	196114	990401-449	*	RES MF 1/4W 1% 31.6K
R4904	204794	990401-465		RES MF 1/4W 1% 46.4K
R4905	175054	2819434-729		RES CF 1/4W 2% 22K
R4920	175417	2819434-714		RES CF 1/4W 2% 5.1K
R4922	197470	1B14213-20A		RES CMF 1/10W 5% 20K
RT4501	181161	93697-005		RES CMF 1/8W 5% .05R
SCR501	194320	1415780-007		SCR
SF2301	200203	1C40002-01A		FILTER ACOUSTIC WAVE
T4101	200204	1C67101-01A	*	TRANSFORMER ISO DRIVER
T4102	207885	2G25021-B4C	*	TRANSFORMER SMT CTC169PA,PD
T4102	210896	2G25021-B7B	*	TRANSFORMER SMT CTC169PB,PC
T4301	206394	2G32005-501	*	TRANSFORMER HORIZ DR/VERT
T4401	200450	2G25018-502	*	TRANSFORMER IHVT W/ SHRINK TUBING (FOR CHASSIS W/SLOT UNDER MTG AREA)
T4401	232191	2G25018-A3A	*	TRANSFORMER IHVT (FOR CHASSIS W/NO SLOT UNDER MTG AREA)
U1001	200137	1A51125-01A	*	IC SIGNAL DEFL/PROCESS
U1401	161079	1421826-001		IC AUDIO SWITCHING
U2601	179729	1421886-001		IC ANALOG COMB
U3101	218817	XX15040-54A		IC DIG MICROPROCESSOR CTC169PA,PB,PC
U3101	218816	XX15040-53A		IC DIG MICROPROCESSOR CTC169PD
U3200	218818	1F51001-09B		IC EEPROM CTC169PA
U3200	218819	1F51001-10B		IC EEPROM CTC169PB
U3200	218820	1F51001-11B		IC EEPROM CTC169PC
U3200	218821	1F51001-12B		IC EEPROM CTC169PD
U4101	200419	1A51117-01A	*	IC REGULATOR CONTROL
U4501	200420	1A51123-01A		IC VERTICAL SWITCH
U4801	200420	1A51123-01A		IC PINCUSHION

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
Y2801	161235	2816766-002	CRYSTAL 3.58MHZ
Y3101	209856	2816766-13A	CRYSTAL 8MHZ
Y4301	200210	XX11004-909	RESONATOR
	180857	1448216-003	BEAD, CERAMIC
	202018	6R04012-03B	* BRACKET, SUPPORT BIAS DRIVE
	181138	2862928-001	CLIP, FOR Q4101 (SMALL)
	181032	2862928-002	CLIP, FOR Q4101 (LARGE)
	200216	8R10006-01C	* HOUSING, FOCUS
	250045	6R23005-01A	* LENS, LED/LDR
	135255	59149-106	NUT, CONTROL MTG
	203754	6R16010-01B	* OVERLAY, JACK PANEL RF SWITCH
	203772	6R16011-01A	* OVERLAY, JACK PANEL TUNER
	204808	6R16012-01B	* OVERLAY, JACK PANEL SVHS
	204807	8R14007-01G	* PANEL, JACK
	139301	1479290-001	RETAINER, BEAD CHAIN
	154382	1449749-017	SUPPORT, FOR DNR PCB
	204822	1449749-028	SUPPORT, FOR HV REG PCB
	154385	2870929-003	WIRE TIE, TWIST END

CHASSIS FAMILY 4

CTC169PE
CTC169PF
CTC169PG
CTC169PH
CTC169PJ
CTC169PK
CTC169PM

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
C1201	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C1203	190499	1C30179-47A	CAP LYTC 4.7UF M 100V
C1204	174402	2861142-33A	CAPCC 10PF F NPO 50V
C1401	208429	XX43329-660	CAP LYTC 47UF M 16V
C1402	208429	XX43329-660	CAP LYTC 47UF M 16V
C1403	193043	1C30230-47A	CAP LYTC 47UF M 25V
C1404	193043	1C30230-47A	CAP LYTC 47UF M 25V
C1405	189978	1C30121-22A	CAP LYTC 220UF M 16V (SEE NOTE@)
C1405	214729	XX50880-170	CAP LYTC 220UF M 35V (SEE NOTE@)
C1406	181090	2861143-14A	CAPCC 39PF J NPO 50V
C1407	181091	2861143-84A	CAPCC 150PF J NPO 50V
C1408	207851	XX20438-725	CAP LYTC 10UF M 16V
C1409	215555	XX40432-770	CAPCC .01UF K X7R 50V
C1410	210893	1C18571-47A	CAPCC 470PF K X7R 50V
C1411	215555	XX40432-770	CAPCC .01UF K X7R 50V
C1412	189981	1C30150-10A	CAP LYTC 10UF M 50V (SEE NOTE@)
C1412	156239	XX30935-880	CAP LYTC 10UF M 63V (SEE NOTE@)
C2301	215555	XX40432-770	CAPCC .01UF K X7R 50V
C2302	215555	XX40432-770	CAPCC .01UF K X7R 50V
C2303	215555	XX40432-770	CAPCC .01UF K X7R 50V
C2304	160077	1C30178-47A	CAP LYTC .47UF M 100V
C2305	190551	2861146-75Z	CAPCC .022UF K X7R 50V
C2306	215555	XX40432-770	CAPCC .01UF K X7R 50V
C2307	190499	1C30179-47A	CAP LYTC 4.7UF M 100V
C2308	190543	2861143-94A	CAPCC 180PF J NPO 50V
C2309	174403	2861142-44A	CAPCC 12PF J NPO 50V
C2310	214028	XX50882-640	CAPCC 18PF K NPO 50V
C2311	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C2312	174401	2861141-92A	CAPCC 7PF D NPO 50V
C2313	190500	1C31121-18A	CAP LYTC 180UF M 16V
C2314	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C2315	215555	XX40432-770	CAPCC .01UF K X7R 50V
C2316	200139	2861144-64A	CAPCC 560PF J NPO 50V
C2317	215555	XX40432-770	CAPCC .01UF K X7R 50V
C2601	143879	2841253-92M	CAPCD 1000PF K Z5P 50V
C2602	174408	2861142-94A	CAPCC 33PF J NPO 50V
C2603	174412	2861143-64A	CAPCC 100PF J NPO 50V
C2604	174404	2861142-54A	CAPCC 15PF J NPO 50V
C2605	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C2606	197600	1C18572-10A	CAPCC 1000PF K X7R 50V
C2701	200141	2821714-224	CAP POLY .1UF K 63V
C2704	174402	2861142-32A	CAPCC 10PF F NPO 50V
C2705	189991	1C30179-10A	CAP LYTC 1UF M 100V CTC169PF,PG,PH, PJ,PK,PM
C2705	215555	XX40432-770	CAPCC .01UF K X7R 50V CTC169PE
C2706	189991	1C30179-10A	CAP LYTC 1UF M 100V CTC169PF,PG,PH, PJ,PK,PM
C2706	215555	XX40432-770	CAPCC .01UF K X7R 50V CTC169PE
C2707	174412	2861143-64A	CAPCC 100PF J NPO 50V
C2708	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C2709	189991	1C30179-10A	CAP LYTC 1UF M 100V
C2710	176851	1C30120-33A	CAP LYTC 33UF M 16V (SEE NOTE@)
C2710	151578	XX11054-710	CAP LYTC 33UF M 35V (SEE NOTE@)
C2711	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C2712	189981	1C30150-10A	CAP LYTC 10UF M 50V (SEE NOTE@)
C2712	156239	XX30935-880	CAP LYTC 10UF M 63V (SEE NOTE@)
C2715	200436	1C30169-68A	CAP LYTC 6.8UF M 63V (SEE NOTE@)
C2715	175120	XX80434-380	CAP LYTC 6.8UF M 100V (SEE NOTE@)
C2717	190520	2821714-228	CAP POLY .22UF K 63V
C2718	174412	2861143-64A	CAPCC 100PF J NPO 50V
C2720	175120	1C30179-68A	CAP LYTC 6.8UF M 100V
C2723	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
C2724	193338	1C18501-18A	CAPCC 180PF J NPO 50V
C2801	215555	XX40432-770	CAPCC .01UF K X7R 50V
C2802	195691	1C30179-22A	CAP LYTC 2.2UF M 100V
C2803	190551	2861146-75Z	CAPCC .022UF K X7R 50V
C2804	174404	2861142-54A	CAPCC 15PF J NPO 50V
C2805	189991	1C30179-10A	CAP LYTC 1UF M 100V
C2806	151119	1C30179-33A	CAP LYTC 3.3UF M 100V
C2807	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C2808	210892	1C18573-18A	CAPCC .018PF K X7R 50V
C2809	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C2810	190500	1C31121-18A	CAP LYTC 180UF M 16V
C2811	194903	1C18400-22A	CAPCC 22PF J NPO 50V
C2812	194903	1C18400-22A	CAPCC 22PF J NPO 50V
C2813	194903	1C18400-22A	CAPCC 22PF J NPO 50V
C2814	174410	2861143-44A	CAPCC 68PF J NPO 50V
C2815	192050	1C18500-27A	CAPCC 27PF K NPO 50V
C2905	174409	2861143-24A	CAPCC 47PF J NPO 50V
C2909	190542	2861143-34A	CAPCC 56PF J NPO 50V
C2910	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C2911	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C2918	193036	2861144-55Z	CAPCC 470PF K X7R 50V
C2919	193036	2861144-55Z	CAPCC 470PF K X7R 50V
C2920	200143	2861144-45Z	CAPCC 390PF K X7R 50V
C2927	175397	2861143-95A	CAPCC 180PF K NPO 50V
C2928	197600	1C18572-10A	CAPCC 1000PF K X7R 50V
C3101	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3102	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3103	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C3104	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3105	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3106	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3107	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3108	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3109	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3110	194903	1C18500-22A	CAPCC 22PF K NPO 50V
C3114	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3115	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C3116	200144	1C18572-68A	CAPCC 6800PF K X7R 50V
C3117	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3119	174408	2861142-94A	CAPCC 33PF J NPO 50V (SEE NOTE@)
C3119	234655	XX10154-670	CAPCC 30PF J NPO 50V (SEE NOTE@)
C3120	174408	2861142-94A	CAPCC 33PF J NPO 50V (SEE NOTE@)
C3120	234655	XX10154-670	CAPCC 30PF J NPO 50V (SEE NOTE@)
C3121	181460	2861144-95Z	CAPCC 1000PF K X7R 50V

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
C3123	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3124	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3125	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3126	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3127	197600	1C18572-10A	CAPCC 1000PF K X7R 50V
C3128	200139	2861144-64A	CAPCC 560PF J NPO 50V
C3129	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C3144	202904	1C18501-56A	CAPCC 560PF K NPO 50V
C3145	193340	1C18501-10A	CAPCC 100PF K NPO 50V
C3201	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C3301	174412	2861143-64A	CAPCC 100PF J NPO 50V
C3302	174412	2861143-64A	CAPCC 100PF J NPO 50V
C3303	193340	1C18401-10A	CAPCC 100PF J NPO 50V
C3304	215555	XX40432-770	CAPCC .01UF K X7R 50V
C3305	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3306	174412	XX11053-650	CAPCC 100PF J NPO 50V
C3307	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3308	197600	1C18572-10A	CAPCC 1000PF K X7R 50V
C3309	197600	1C18572-10A	CAPCC 1000PF K X7R 50V
C3310	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
C3311	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3312	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3313	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C3314	178188	2861144-14A	CAPCC 220PF J NPO 50V
C3315	174412	2861143-64A	CAPCC 100PF J NPO 50V
C3316	202904	1C18501-56A	CAPCC 560PF K NPO 50V
C3317	202907	1C18400-15A	CAPCC 15PF J NPO 50V
C3318	174407	2861142-84A	CAPCC 27PF J NPO 50V
C3319	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C3320	174407	2861142-84A	CAPCC 27PF J NPO 50V
C3321	174407	2861142-84A	CAPCC 27PF J NPO 50V
C3322	189991	1C30179-10A	CAP LYTC 1UF M 100V
C3323	192049	1C18400-82A	CAPCC 82PF J NPO 50V
C3602	215555	XX40432-770	CAPCC .01UF K X7R 50V
C3603	215555	XX40432-770	CAPCC .01UF K X7R 50V
C3604	190500	1C31121-18A	CAP LYTC 180UF M 16V
C3605	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C3606	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C4002	190538	2821785-005 *	CAPCD 680PF M Z5P 1KV
C4005	190538	2821785-005 *	CAPCD 680PF M Z5P 1KV
C4006	250102	2870613-109 *	CAP CAPRISTOR
C4007	190561	2875500-009 *	CAP LYTC 820UF K 200V (SEE NOTE@)
C4007	190560	XX80434-450 *	CAP LYTC 680UF M 200V (SEE NOTE@)
C4008	195697	1C10106-21A *	CAPCD 5000PF M Z5V 120V (SEE NOTE@)
C4008	223330	XX10043-400 *	CAPCD 3400PF M Z5V 120V (SEE NOTE@)
C4009	195749	2821785-002	CAPCD .012UF M Z5U 250V
C4101	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C4102	195691	1C30279-22A	CAP LYTC 2.2UF M 100V
C4103	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C4104	189982	1C30250-15A	CAP LYTC 15UF M 50V (SEE NOTE@)
C4104	228427	XX40433-220	CAP LYTC 15UF M 63V (SEE NOTE@)
C4105	181099	2821714-330	CAP POLY .33UF J 50V
C4106	174421	2861145-45Z	CAPCC 2200PF K X7R 50V
C4107	143879	2841253-92M	CAPCD 1000PF K Z5P 50V
C4108	208002	1C31170-39A	CAP LYTC 39UF M 100V
C4109	200145	2841260-42M	CAPCD 1800PF K Z5P 250V
C4110	227068	XX15065-090 *	CAPCD 470PF J SL 2KV (SEE NOTE@)
C4110	143242	1490360-006 *	CAPCD 470PF J N1500 1.5KV (SEE NOTE@)
C4111	190538	2821785-005	CAPCD 680PF M Z5P 1KV
C4112	201619	1C20120-09A *	CAP POLY 5600PF J 800V
C4113	195699	2861146-85Z	CAPCC .027UF K X7R 50V
C4115	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C4116	148067	XX90568-860	CAPCD 470PF K Z5P 50V
C4118	190496	1C30241-47A	CAP LYTC 470UF M 35V
C4136	215555	XX40432-770	CAPCC .01UF K X7R 50V
C4138	215555	XX40432-770	CAPCC .01UF K X7R 50V
C4139	179277	2861147-25Z	CAPCC .047UF J X7R 50V
C4140	190538	2821785-005	CAPCD 680PF M Z5P 1KV
C4141	200147	2875500-10A *	CAP LYTC 470UF M 180V
C4142	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C4143	175119	1C30242-10A	CAP LYTC 1000UF M 35V
C4144	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C4145	190721	1C31142-10A	CAP LYTC 1000UF 35V
C4146	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C4147	190497	1C30251-68A	CAP LYTC 680UF K 50V
C4148	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C4149	190497	1C30251-68A	CAP LYTC 680UF K 50V
C4150	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C4151	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C4152	215555	XX40432-770	CAPCC .01UF K X7R 50V
C4153	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
C4154	215555	XX40432-770	CAPCC .01UF K X7R 50V
C4155	210893	1C18451-47A	CAPCC 470PF J N750 50V
C4301	189991	1C30179-10A	CAP LYTC 1UF M 100V
C4302	195692	2861146-55Z	CAPCC .015UF K X7R 50V
C4303	190551	2861146-75Z	CAPCC .022UF K X7R 50V
C4304	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
C4305	190548	2861145-85Z	CAPCC 4700PF K X7R 50V
C4306	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C4307	175120	1C30179-68A	CAP LYTC 6.8UF M 100V
C4309	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C4310	210158	2821714-320	CAP POLY .047UF J 63V
C4311	190499	1C31159-47A	CAP LYTC 4.7UF M 50V
C4312	149727	2841254-32M	CAPCD 1800PF K Z5P 50V
C4313	200148	1C18672-47A	CAPCC 4700PF M X7R 50V
C4314	193036	2861144-55Z	CAPCC 470PF K X7R 50V
C4315	174403	2861142-44A	CAPCC 12PF J NPO 50V
C4316	226095	XX11055-480	CAPCD 390PF K SL 50V
C4401	206007	XX20439-661 *	CAP POLY .015UF HP 1.6KV
C4402	214754	XX80428-940 *	CAP POLY .047UF J 400V
C4405	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C4406	150245	1490360-022 *	CAPCD 680PF J N1500 1.5KV (SEE NOTE@)
C4406	227069	XX15065-100 *	CAPCD 680PF J SL 2KV (SEE NOTE@)
C4407	190534	2821785-001 *	CAPCD 4700PF K Z5P 250V
C4502	179623	2841261-12M	CAPCD 5600PF K Z5P 250V
C4503	226096	XX15050-120 *	CAP LYTC 680UF M 50V
C4504	160077	1C30178-47A	CAP LYTC .47UF M 100V
C4505	189982	1C30250-15A	CAP LYTC 15UF M 50V (SEE NOTE@)
C4505	228427	XX40433-220	CAP LYTC 15UF M 63V (SEE NOTE@)
C4511	200439	1C20110-46A *	CAP POLY .99UF J 250V
C4512	195691	1C30179-22A	CAP LYTC 2.2UF M 100V
C4518	181099	2821714-330	CAP POLY .33UF J 50V
C4519	181099	2821714-330	CAP POLY .33UF J 50V
C4520	151578	1C30240-33A	CAP LYTC 33UF M 35V (SEE NOTE@)
C4520	221142	XX11067-100	CAP LYTC 33UF M 50V (SEE NOTE@)
C4521	205192	1C15199-01A	CAPCD 8200PF K X7R 50V
C4522	210158	2821714-320	CAP POLY .047UF J 63V
C4523	179277	2861147-25Z	CAPCC .047UF J X7R 50V
C4524	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C4525	190552	XX70427-610	CAPCC .1UF K X7R 50V
C4610	215555	XX40432-770	CAPCC .01UF K X7R 50V
C4611	189981	1C30150-10A	CAP LYTC 10UF M 50V (SEE NOTE@)
C4611	156239	XX30935-880	CAP LYTC 10UF M 63V (SEE NOTE@)
C4612	214728	XX80434-330	CAP LYTC 100UF M 10V
C4701	146158	2821714-821	CAP POLY .056UF K 250V
C4702	190538	2821785-005	CAPCD 680PF M Z5P 1KV
C4703	190479	1490001-062	CAP LYTC 47UF M 250V
C4704	190538	2821785-005	CAPCD 680PF M Z5P 1KV
C4705	190497	1C30251-68A	CAP LYTC 680UF K 50V
C4706	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C4707	179277	2861147-25Z	CAPCC .047UF J X7R 50V
C4711	193043	1C30130-47A	CAP LYTC 47UF M 50V CTC169PB,PC,PE,PF,PG, PH (SEE NOTE@)
C4711	189979	XX80434-350	CAP LYTC 47UF M 25V CTC169PE,PH,PJ (SEE NOTE@)
C4711	161285	XX20467-280	CAP LYTC 220UF M 35V CTC169PB,PC,PF,PG, PK,PM (SEE NOTE@)
C4712	192846	1C30120-68A	CAP LYTC 68UF M 16V
C4713	190538	2821785-005	CAPCD 680PF M Z5P 1KV
C4714	194366	1C30131-10A	CAP LYTC 100UF M 25V
C4715	215555	XX40432-770	CAPCC .01UF K X7R 50V
C4801	204488	2841204-004	CAP LYTC 4.7UF M 35V
C4802	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C4807	189981	1C30150-10A	CAP LYTC 10UF M 50V

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
C4808	192846	1C30120-68A	CAP LYTC 68UF M 16V
C4811	174421	2861145-45Z	CAPCC 2200PF K X7R 50V
C4812	197600	1C18572-10A	CAPCC 1000PF K X7R 50V
C4813	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C4814	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C4815	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C4816	204791	2821714-209	CAP POLY 5600PF K 63V
C4817	190520	2841258-92M	CAPCD 150PF K Z5P 250V
C4901	146181	XX60440-010	CAPCD 150PF K Z5P 250V
C4902	202011	2821714-324	CAP POLY .1UF J 63V
C4903	143879	2841253-92M	CAPCD 1000PF K Z5P 50V
C4905	189991	1C30179-10A	* CAP LYTC 1UF M 100V (SEE NOTE@)
C4905	151119	XX11054-840	* CAP LYTC 3.3UF M 100V ALL EXCEPT CTC169PE, PF,PG,PH (SEE NOTE@)
C4906	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
CF1201	195702	1496278-005	FILTER CERAMIC
CF2301	181125	2821737-001	FILTER
CR1401	176746	99201-210	DIODE ZENER 5.6V .4W (SEE NOTE@)
CR1401	215488	XX11073-650	DIODE ZENER 5.6V .5W (SEE NOTE@)
CR1402	176746	99201-210	DIODE ZENER 5.6V .4W (SEE NOTE@)
CR1402	215488	XX11073-650	DIODE ZENER 5.6V .5W (SEE NOTE@)
CR1403	176746	99201-210	DIODE ZENER 5.6V .4W (SEE NOTE@)
CR1403	215488	XX11073-650	DIODE ZENER 5.6V .5W (SEE NOTE@)
CR1404	176746	99201-210	DIODE ZENER 5.6V .4W (SEE NOTE@)
CR1404	215488	XX11073-650	DIODE ZENER 5.6V .5W (SEE NOTE@)
CR1405	192848	99201-215	DIODE ZENER 9.1V .4W (SEE NOTE@)
CR1405	227362	XX90578-100	DIODE ZENER 9.1V .5W (SEE NOTE@)
CR1406	164874	1471872-010	DIODE
CR2701	164717	1471872-006	DIODE
CR2702	164717	1471872-006	DIODE
CR2703	164717	1471872-006	DIODE
CR2704	164717	1471872-006	DIODE
CR2705	164717	1471872-006	DIODE
CR2706	164717	1471872-006	DIODE
CR2802	164717	1471872-006	DIODE
CR2901	164717	1471872-006	DIODE
CR2903	164717	1471872-006	DIODE
CR2907	164717	1471872-006	DIODE
CR2908	164717	1471872-006	DIODE
CR3101	176746	99201-210	DIODE ZENER 5.6V .4W (SEE NOTE@)
CR3101	215488	XX11073-650	DIODE ZENER 5.6V .5W (SEE NOTE@)
CR3101	233083	XX15088-970	DIODE ZENER 5.65V .5W (SEE NOTE@)
CR3102	164717	1471872-006	DIODE
CR3103	164717	1471872-006	DIODE
CR3301	164717	1471872-006	DIODE
CR3302	164717	1471872-006	DIODE
CR3601	200155	99201-328	DIODE ZENER 33V .4W (SEE NOTE@)
CR3601	215489	XX80442-730	DIODE ZENER 33V .5W (SEE NOTE@)
CR4001	147015	2811925-002	DIODE
CR4002	147015	2811925-002	DIODE
CR4003	147015	2811925-002	DIODE
CR4004	147015	2811925-002	DIODE
CR4101	207878	2820546-002	DIODE (SEE NOTE@)
CR4101	227066	XX15047-700	DIODE (SEE NOTE@)
CR4102	164717	1471872-006	DIODE
CR4105	207878	XX60341-800	DIODE
CR4106	176296	1476171-031	DIODE
CR4111	202055	1J05008-25A	* DIODE B+ REG KIT
CR4112	164874	1471872-010	DIODE
CR4115	136634	99201-219	DIODE ZENER 13V .4W (SEE NOTE@)
CR4115	226783	XX70438-310	DIODE ZENER 13V .5W (SEE NOTE@)
CR4116	200157	2820545-007	DIODE
CR4117	176296	1476171-031	* DIODE
CR4118	164590	2820545-002	DIODE
CR4119	164590	2820545-002	DIODE
CR4120	164590	2820545-002	DIODE
CR4121	136634	99201-219	DIODE ZENER 13V .4W (SEE NOTE@)
CR4121	226783	XX70438-310	DIODE ZENER 13V .5W (SEE NOTE@)
CR4122	200158	99202-103	DIODE ZENER 3V 1W
CR4123	176746	99201-210	DIODE ZENER 5.6V .4W (SEE NOTE@)
CR4123	215488	XX11073-650	DIODE ZENER 5.6V .5W (SEE NOTE@)
CR4302	164717	1471872-006	DIODE
CR4303	161871	99201-214	DIODE ZENER 8.2V .4W (SEE NOTE@)
CR4303	228429	XX11073-660	DIODE ZENER 8.2V .5W (SEE NOTE@)
CR4304	164717	1471872-006	DIODE
CR4305	164717	1471872-006	DIODE
CR4401	198596	XX44001-602	DIODE
CR4402	164589	2820545-005	DIODE
CR4403	139706	1471872-008	DIODE
CR4404	164717	1471872-006	DIODE
CR4501	164717	1471872-006	DIODE
CR4502	139706	1471872-008	DIODE
CR4503	161871	99201-214	DIODE ZENER 8.2V .4W (SEE NOTE@)
CR4503	228429	XX11073-660	DIODE ZENER 8.2V .5W (SEE NOTE@)
CR4504	164589	2820545-004	DIODE
CR4511	164717	1471872-006	DIODE
CR4512	192848	99201-215	DIODE ZENER 9.1V .4W
CR4513	164717	1471872-006	DIODE
CR4514	192848	99201-215	DIODE ZENER 9.1V .4W (SEE NOTE@)
CR4514	227362	XX90578-100	DIODE ZENER 9.1V .5W (SEE NOTE@)
CR4515	157301	1471872-024	DIODE
CR4516	164717	1471872-006	DIODE
CR4606	161081	99201-310	DIODE ZENER 5.6V .4W (SEE NOTE@)
CR4606	226504	XX70438-200	DIODE ZENER 5.6V .5W (SEE NOTE@)
CR4701	176296	1476171-031	DIODE
CR4702	153672	1476171-044	DIODE (SEE NOTE@)
CR4702	207878	XX60341-800	DIODE (SEE NOTE@)
CR4705	176296	1476171-031	DIODE
CR4709	196062	2820500-001	DIODE
CR4710	139706	1471872-008	DIODE
CR4712	209741	99201-314	DIODE ZENER 8.2V .4W
CR4713	153672	1476171-044	DIODE (SEE NOTE@)
CR4713	207878	XX60341-800	DIODE (SEE NOTE@)
CR4803	176296	1476171-031	DIODE
CR4805	138974	99201-208	DIODE ZENER 4.7V .4W
CR4806	164717	1471872-006	DIODE
CR4901	157301	1471872-024	* DIODE
CR4902	159429	1497049-006	* DIODE ZENER 10V .2W
DL2601	223169	XX15051-080	DELAY LINE
DL2701	206397	2821744-05A	DELAY LINE
F4001	175425	2821524-118	* FUSE 5A 125V
FB4101	152102	2843117-001	BEAD
FB4102	152102	2843117-001	BEAD
FB4103	153328	2843165-004	BEAD (SEE NOTE@)
FB4103	226467	XX50895-750	BEAD (SEE NOTE@)
FB4301	152103	2843117-002	BEAD
FB4302	152103	2843117-002	BEAD
FB4401	204792	1Z02001-01A	COIL
FB4402	206390	2843117-012	BEAD
FL4001	207879	2G45002-522	* FILTER AC LINE
J1401	190514	1P21002-41A	JACK PHONO VID IN 1 (SEE NOTE@)
J1401	203741	1P21011-04A	JACK PHONO VID IN 1 (SEE NOTE@)

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
J1402	190514	1P21002-41A	JACK PHONO VID IN 2 (SEE NOTE@)
J1402	203741	1P21011-04A	JACK PHONO VID IN 2 (SEE NOTE@)
J1403	190514	1P21002-41A	JACK PHONO SEL VID OUT (SEE NOTE@)
J1403	203741	1P21011-04A	JACK PHONO SEL VID OUT (SEE NOTE@)
J1404	195705	1P24004-01A	SOCKET SVHS
J3001	226091	XX11094-960	CONNECTOR 10 PIN FPA
J4901	190476	1466404-320	* CONNECTOR XRP TEST
JC111	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC112	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC302	181161	93697-005	RES CMF 1/8W 5% .05R
JC303	181161	93697-005	RES CMF 1/8W 5% .05R
JC304	181161	93697-005	RES CMF 1/8W 5% .05R
JC306	181161	93697-005	RES CMF 1/8W 5% .05R
JC402	181161	93697-005	RES CMF 1/8W 5% .05R
JC403	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC404	181161	93697-005	RES CMF 1/8W 5% .05R
JC405	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC406	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC407	181161	93697-005	RES CMF 1/8W 5% .05R
JC408	181161	93697-005	RES CMF 1/8W 5% .05R
JC409	181161	93697-005	RES CMF 1/8W 5% .05R
JC410	181161	93697-005	RES CMF 1/8W 5% .05R
JC411	181161	93697-005	RES CMF 1/8W 5% .05R
JC412	181161	93697-005	RES CMF 1/8W 5% .05R
JC413	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC414	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC415	181161	93697-005	RES CMF 1/8W 5% .05R
JC416	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC422	181161	93697-005	RES CMF 1/8W 5% .05R
JC425	174344	XX80439-640	RES CMF 1/8W 5% 270R
JC426	174344	XX80439-640	RES CMF 1/8W 5% 270R
JC427	174344	XX80439-640	RES CMF 1/8W 5% 270R
JC428	181161	93697-005	RES CMF 1/8W 5% .05R
JC429	181161	93697-005	RES CMF 1/8W 5% .05R
JC430	181161	93697-005	RES CMF 1/8W 5% .05R
JC431	181161	93697-005	RES CMF 1/8W 5% .05R
JC432	181161	93697-005	RES CMF 1/8W 5% .05R
JC445	181161	93697-005	RES CMF 1/8W 5% .05R
JC446	181161	93697-005	RES CMF 1/8W 5% .05R
JC447	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC448	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC449	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC450	181161	93697-005	RES CMF 1/8W 5% .05R
JC451	181161	93697-005	RES CMF 1/8W 5% .05R
JC452	181161	93697-005	RES CMF 1/8W 5% .05R
JC453	205408	XX80440-510	RES CMF 1/10W 10% .0R
L1201	190504	1C55100-02B	COIL
L2301	195708	1C51108-68A	COIL .68UH
L2302	197616	1C51109-22A	COIL 2.2UH
L2303	190506	1C55100-05B	COIL
L2304	190503	1C55100-01B	COIL
L2305	197616	1C51109-22A	COIL 2.2UH
L2306	206035	1471986-037	COIL
L2307	210687	1C51100-12A	COIL 12UH
L2601	216800	1C55100-11A	COIL ADJ (SEE NOTE@)
L2601	223800	XX15048-450	COIL 18UH (SEE NOTE@)
L2602	195710	1C51100-39A	COIL 39UH
L2603	160518	1C51100-10A	COIL 10UH
L2604	158726	2873607-121	COIL 4.7UH
L2702	195710	1C51100-39A	COIL 39UH
L2704	195750	1C51111-12A	COIL
L2705	158726	2873607-121	* COIL 4.7UH
L2706	175409	2873607-125	COIL 10UH
L2801	195712	1C51100-22A	COIL 22UH
L2802	195712	1C51100-22A	COIL 22UH
L2803	195712	1C51100-22A	COIL 22UH
L2804	200161	1C51100-33A	COIL
L3101	175409	2873607-125	COIL 10UH
L3601	161243	1C51101-10A	* COIL 100UH
L3602	207880	XX60245-200	COIL
L4101	190480	1497050-012	COIL 2.2UH
L4401	192844	1C51400-01A	* COIL (SEE NOTE@)
L4401	228428	XX15069-310	* COIL (SEE NOTE@)
L4701	190729	2873607-133	COIL 47UH
L4702	175409	2873607-125	COIL 10UH
L4803	226097	2G32005-C1A	* COIL
Q1201	215495	XX11070-770	TRANSISTOR AUDIO BUFF
Q1401	215496	XX30946-660	TRANSISTOR VIDEO AMP
Q1402	215495	XX11070-770	TRANSISTOR VIDEO AMP
Q1403	143806	1417347-004	TRANSISTOR VIDEO BUFF
Q1404	215495	XX11070-770	TRANSISTOR CHROMA AMP
Q1405	215495	XX11070-770	TRANSISTOR CHROMA BUFF
Q1406	215495	XX11070-770	TRANSISTOR VIDEO BUFF
Q2301	146848	1417405-002	TRANSISTOR IF PREAMP
Q2302	215495	XX11070-770	TRANSISTOR AUDIO IF AMP
Q2701	215495	XX11070-770	TRANSISTOR VIDEO AMP
Q2702	146847	1417306-013	TRANSISTOR VIDEO AMP (SEE NOTE@)
Q2702	223704	XX50888-770	TRANSISTOR VIDEO AMP (SEE NOTE@)
Q2703	143806	1417347-004	TRANSISTOR BEAM LIMIT
Q2704	146847	1417306-013	TRANSISTOR HI APL LIMIT (SEE NOTE@)
Q2704	223704	XX50888-770	TRANSISTOR HI APL LIMIT (SEE NOTE@)
Q2705	145410	1417330-011	TRANSISTOR HI APL LIMIT (SEE NOTE@)
Q2705	219025	XX15043-350	TRANSISTOR HI APL LIMIT (SEE NOTE@)
Q2707	215495	XX11070-770	TRANSISTOR LUMA BUFFER
Q2709	215495	XX11070-770	TRANSISTOR CLAMP
Q2903	176980	1417309-006	TRANSISTOR RED DRIVER
Q2904	176980	1417309-006	TRANSISTOR BLU DRIVER
Q2905	176980	1417309-006	TRANSISTOR GRN DRIVER
Q2906	143806	1417347-004	TRANSISTOR LUMA BUFFER
Q2908	176980	1417309-006	TRANSISTOR RED OSD
Q2909	176980	1417309-006	TRANSISTOR BLU OSD
Q2910	176980	1417309-006	TRANSISTOR GRN OSD
Q2911	215495	XX11070-770	TRANSISTOR -Y BUFFER
Q2912	219412	XX15047-510	TRANSISTOR HORIZ BLANK BUFFER
Q3101	215496	XX30946-660	TRANSISTOR STBY SENSE
Q3102	215495	XX11070-770	TRANSISTOR RESET
Q3301	145410	1417330-011	TRANSISTOR SYNC SEP (SEE NOTE@)
Q3301	219025	XX15043-350	TRANSISTOR SYNC SEP (SEE NOTE@)
Q3302	215495	XX11070-770	TRANSISTOR BLANKING SW
Q3303	215495	XX11070-770	TRANSISTOR CLAMP
Q3304	215496	XX30946-660	TRANSISTOR CLOSED CAPTION BUFFER
Q4101	200165	XX10778-600	TRANSISTOR REGULATOR OUT
Q4105	143802	1417330-010	TRANSISTOR ERROR AMP (SEE NOTE@)
Q4105	219025	XX15043-350	TRANSISTOR ERROR AMP (SEE NOTE@)
Q4106	143802	1417330-010	TRANSISTOR PWM GENER (SEE NOTE@)
Q4106	219025	XX15043-350	TRANSISTOR PWM GENER (SEE NOTE@)
Q4107	146847	1417306-013	TRANSISTOR PWM AMP (SEE NOTE@)
Q4107	223704	XX50888-770	TRANSISTOR PWM AMP (SEE NOTE@)
Q4109	146847	1417306-013	TRANSISTOR ERROR AMP (SEE NOTE@)
Q4109	223704	XX50888-770	TRANSISTOR ERROR AMP (SEE NOTE@)
Q4111	215496	XX30946-660	TRANSISTOR CLAMP
Q4301	146847	1417306-013	TRANSISTOR ON/OFF SW (SEE NOTE@)
Q4301	223704	XX50888-770	TRANSISTOR ON/OFF SW (SEE NOTE@)
Q4302	200168	XX10905-400	TRANSISTOR HORIZ BUFF
Q4304	146847	1417306-013	TRANSISTOR ON/OFF BUFF (SEE NOTE@)
Q4304	223704	XX50888-770	TRANSISTOR ON/OFF BUFF (SEE NOTE@)
Q4305	215495	XX11070-770	TRANSISTOR ON/OFF BUFF
Q4306	215495	XX11070-770	TRANSISTOR ON/OFF BUFF
Q4401	200167	XX30792-600	TRANSISTOR HORIZ OUT
Q4402	215495	XX11070-770	TRANSISTOR HORIZ SYNC
Q4505	146847	1417306-013	TRANSISTOR V RAMP RESET (SEE NOTE@)

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
Q4505	223704	XX50888-770	TRANSISTOR V RAMP RESET (SEE NOTE@)
Q4506	148970	1417419-001	TRANSISTOR V RAMP LIMIT
Q4507	146847	1417306-013	TRANSISTOR V SYNC KILL (SEE NOTE@)
Q4507	223704	XX50888-770	TRANSISTOR V SYNC KILL (SEE NOTE@)
Q4601	146847	1417306-013	TRANSISTOR 5V STBY (SEE NOTE@)
Q4601	223704	XX50888-770	TRANSISTOR 5V STBY (SEE NOTE@)
Q4702	157627	1417364-003	TRANSISTOR 12V RUN
Q4703	157627	1417364-003	TRANSISTOR 5V RUN
Q4704	157627	1417364-003	TRANSISTOR 9V RUN
Q4705	146847	1417306-013	TRANSISTOR ON/OFF BUFF (SEE NOTE@)
Q4705	223704	XX50888-770	TRANSISTOR ON/OFF BUFF (SEE NOTE@)
Q4801	215496	XX30946-660	TRANSISTOR V PIN
Q4802	200168	XX10905-400	TRANSISTOR V PIN
Q4803	146847	1417306-013	TRANSISTOR V PIN
Q4804	215495	XX11070-770	TRANSISTOR PINCUSHION
Q4901	147665	1417406-003 *	TRANSISTOR XRP (SEE NOTE@)
Q4901	223704	XX50888-770 *	TRANSISTOR XRP (SEE NOTE@)
R1201	174366	93697-427	RES CMF 1/8W 5% 18K
R1203	182628	93697-689	RES CMF 1/8W 2% 470R
R1204	181113	2821716-502	RES CONTROL BRT LEVEL
R1401	181066	93697-371	RES CMF 1/8W 5% 82R
R1402	829143	993230-688 *	RES CF 1/4W 2% 430R
R1403	194917	1B14202-30A	RES CMF 1/10W 2% 3K
R1404	190464	93697-708	RES CMF 1/8W 2% 3K
R1405	181066	93697-371	RES CMF 1/8W 5% 82R
R1406	829143	993230-688 *	RES CF 1/4W 2% 430R
R1408	173964	93697-372	RES CMF 1/8W 5% 91R
R1409	190462	93697-697	RES CMF 1/8W 2% 1K
R1410	829143	993230-688 *	RES CF 1/4W 2% 430R
R1411	194917	1B14202-30A	RES CMF 1/10W 2% 3K
R1412	202586	1B14202-11A	RES CMF 1/10W 2% 1.1K
R1413	181488	93697-685	RES CMF 1/8W 2% 330R
R1414	175321	2819434-704	RES CF 1/4W 2% 2K
R1416	181063	93697-370	RES CMF 1/8W 5% 75R
R1417	174364	93697-721	RES CMF 1/8W 2% 10K
R1418	175417	2819434-414	RES CF 1/4W 5% 5.1K
R1419	205291	XX11064-950	RES CMF 1/8W 2% 910R
R1420	182823	93697-700	RES CMF 1/8W 2% 1.3K
R1421	202585	1B14201-51A	RES CMF 1/10W 2% 510R
R1422	202586	1B14202-11A	RES CMF 1/10W 2% 1.1K
R1423	177535	2819434-387	RES CF 1/4W 5% 390R
R1424	159061	93697-369	RES CMF 1/8W 5% 68R
R1425	180816	93697-747	RES CMF 1/8W 2% 120K
R1426	182628	93697-689	RES CMF 1/8W 2% 470R
R1427	181482	93697-701	RES CMF 1/8W 2% 1.5K
R1428	181488	93697-685	RES CMF 1/8W 2% 330R
R1429	192081	1B14212-27A	RES CMF 1/10W 5% 2.7K
R1430	176648	2819434-707	RES CF 1/4W 2% 2.7K
R1431	175418	93697-414	RES CMF 1/8W 5% 5.1K CTC169PE,PH,PJ
R1431	181080	93697-409	RES CMF 1/8W 5% 3.3K CTC169PF,PG,PK,PM
R1432	829010	993272-349 *	RES CFFP 1/4W 5% 10R
R1433	197903	1B14212-18A	RES CMF 1/10W 5% 1.8K
R1434	176818	93697-373	RES CMF 1/8W 5% 100R
R2301	210245	2819434-373 *	RES CF 1/4W 5% 100R
R2302	181482	93697-701	RES CMF 1/8W 2% 1.5K
R2303	178284	93697-687	RES CMF 1/8W 2% 390R
R2304	175741	93697-349	RES CMF 1/8W 5% 10R
R2305	159061	93697-369	RES CMF 1/8W 5% 68R
R2306	181486	93697-673	RES CMF 1/8W 2% 100R
R2307	181493	93697-692	RES CMF 1/8W 2% 620R
R2308	176367	93697-365	RES CMF 1/8W 5% 47R
R2309	178299	93697-415	RES CMF 1/8W 5% 5.6K
R2310	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R2311	181107	2821716-103	RES CONTROL RF AGC (SEE NOTE@)
R2311	189853	XX90574-630	RES CONTROL RF AGC (SEE NOTE@)
R2311	181113	XX11066-940	RES CONTROL RF AGC (SEE NOTE@)
R2312	193061	93697-431	RES CMF 1/8W 5% 27K
R2313	174355	93697-441	RES CMF 1/8W 5% 68K
R2314	207835	1B14214-18A	RES CMF 1/10W 5% 180K
R2315	192082	1B14212-15A	RES CMF 1/10W 5% 1.5K
R2317	205336	1B14211-30A	RES CMF 1/10W 5% 300R
R2318	201140	1B14211-24A	RES CMF 1/10W 5% 240R
R2319	179955	2819434-435	RES CF 1/4W 5% 39K
R2320	181486	93697-673	RES CMF 1/8W 2% 100R
R2321	175321	2819434-404	RES CF 1/4W 5% 2K
R2322	218508	XX70434-200	RES CMF 1/10W 5% 100R
R2323	200172	993272-327 *	RES CF 1/4W 5% 1.2R
R2324	175045	2819434-385	RES CF 1/4W 5% 330R
R2325	192080	1B14210-22A	RES CMF 1/10W 5% 22R
R2326	205346	1B14212-56A	RES CMF 1/10W 5% 5.6K
R2601	192086	1B14211-15A	RES CMF 1/10W 5% 150R
R2602	190460	93697-682	RES CMF 1/8W 2% 240R
R2603	181112	2821716-501	RES CONTROL NOTCH DEPTH
R2604	182823	93697-700	RES CMF 1/8W 2% 1.3K
R2605	175354	2819434-384	RES CF 1/4W 5% 300R
R2606	181056	93697-694	RES CMF 1/8W 2% 750R
R2607	174348	93697-397	RES CMF 1/8W 5% 1K (SEE NOTE@)
R2607	176814	XX11064-740	RES CMF 1/8W 5% 820R (SEE NOTE@)
R2608	830B68	2821523-321 *	RES MFFP 1/2W 5% .68R CTC169PE,PH,PJ,PK,PM
R2608	829010	993272-349 *	RES CFFP 1/4W 5% 10R CTC169PF,PG
R2609	218508	XX70434-200	RES CMF 1/10W 5% 100R
R2701	218508	XX70434-200	RES CMF 1/10W 5% 100R
R2702	176979	2819434-382	RES CF 1/4W 5% 240R (SEE NOTE@)
R2702	829124	XX70430-530	RES CF 1/4W 5% 240R (SEE NOTE@)
R2703	206380	XX11064-770	RES CMF 1/8W 5% 4.7K (SEE NOTE@)
R2704	181071	93697-406	RES CMF 1/8W 5% 2.4K
R2705	175055	2819434-397	RES CF 1/4W 5% 1K
R2706	174364	93697-721	RES CMF 1/8W 2% 10K
R2707	200174	1B14214-20A	RES CMF 1/10W 5% 200K
R2708	175367	2819434-701	RES CF 1/4W 5% 1.5K
R2709	174349	93697-407	RES CMF 1/8W 5% 2.7K
R2710	181486	93697-673	RES CMF 1/8W 2% 100R
R2711	182628	93697-689	RES CMF 1/8W 2% 470R
R2712	178299	93697-415	RES CMF 1/8W 5% 5.6K
R2713	205291	XX11064-950	RES CMF 1/8W 2% 910R
R2714	176816	93697-445	RES CMF 1/8W 5% 100K
R2715	181055	93697-384	RES CMF 1/8W 5% 300R
R2716	190462	93697-697	RES CMF 1/8W 2% 1K
R2718	175890	2819434-411	RES CF 1/4W 5% 3.9K
R2719	180429	990401-422	RES MF 1/4W 1% 16.5K
R2720	202069	XX11059-640	RES CF 1/4W 5% 1K
R2721	206037	993153-193 *	RES CC 1/2W 5% 27K
R2722	192081	1B14212-27A	RES CMF 1/10W 5% 2.7K
R2723	176648	2819434-407	RES CF 1/4W 5% 2.7K
R2724	175317	2819434-421	RES CF 1/4W 5% 10K
R2725	202914	1B14201-75A	RES CMF 1/10W 2% 750R (SEE NOTE@)
R2725	215200	XX50886-560	RES CMF 1/10W 5% 750R (SEE NOTE@)
R2726	176814	93697-395	RES CMF 1/8W 5% 820R
R2727	176816	93697-445	RES CMF 1/8W 5% 100K
R2729	178281	93697-417	RES CMF 1/8W 5% 6.8K
R2730	181109	2821716-202	RES CONTROL CONT PRESET
R2731	181071	93697-406	RES CMF 1/8W 5% 2.4K
R2732	181482	93697-701	RES CMF 1/8W 2% 1.5K
R2733	181493	93697-692	RES CMF 1/8W 2% 620R
R2734	182822	93697-691	RES CMF 1/8W 2% 560R
R2736	178286	93697-693	RES CMF 1/8W 2% 680R
R2739	210245	2819434-373	RES CF 1/4W 5% 100R
R2740	182822	93697-691	RES CMF 1/8W 2% 560R
R2741	192082	1B14212-15A	RES CMF 1/10W 5% 1.5K
R2742	181482	93697-701	RES CMF 1/8W 2% 1.5K
R2801	190462	93697-697	RES CMF 1/8W 2% 1K
R2802	177366	2821716-303	RES CONTROL CHR FILTER
R2803	174368	93697-432	RES CMF 1/8W 5% 30K
R2804	180816	93697-747	RES CMF 1/8W 2% 120K
R2805	181080	93697-409	RES CMF 1/8W 5% 3.3K
R2806	174363	93697-479	RES CMF 1/8W 5% 2.7M
R2809	181051	93697-402	RES CMF 1/8W 5% 1.6K
R2810	181051	93697-402	RES CMF 1/8W 5% 1.6K
R2811	181051	93697-402	RES CMF 1/8W 5% 1.6K
R2812	174366	93697-427	RES CMF 1/8W 5% 18K

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R2813	174367	93697-729	RES CMF 1/8W 2% 22K
R2814	200176	1B14203-30A	RES CMF 1/10W 2% 30K
R2815	174360	93697-454	RES CMF 1/8W 5% 240K
R2816	181107	2821716-103	RES CONTROL TINT PRESET (SEE NOTE@)
R2816	189853	XX90574-630	RES CONTROL TINT PRESET (SEE NOTE@)
R2817	200177	1B14211-27A	RES CMF 1/10W 5% 270R
R2901	190462	93697-697	RES CMF 1/8W 2% 1K
R2902	190462	93697-697	RES CMF 1/8W 2% 1K
R2903	190462	93697-697	RES CMF 1/8W 2% 1K
R2908	175308	2819434-399	RES CF 1/4W 5% 1.2K
R2910	181492	93697-681	RES CMF 1/8W 2% 220R
R2911	176366	93697-405	RES CMF 1/8W 5% 2.2K
R2912	180325	93697-428	RES CMF 1/8W 5% 20K
R2913	190533	2821761-452	RES CONTROL RED BIAS
R2914	181492	93697-681	RES CMF 1/8W 2% 220R
R2915	192096	1B14212-22A	RES CMF 1/10W 5% 2.2K
R2916	180325	93697-428	RES CMF 1/8W 5% 20K
R2917	190533	2821761-452	RES CONTROL BLU BIAS
R2918	181492	93697-681	RES CMF 1/8W 2% 220R
R2919	176366	93697-405	RES CMF 1/8W 5% 2.2K
R2920	180325	93697-428	RES CMF 1/8W 5% 20K
R2921	190533	2821761-452	RES CONTROL GRN BIAS
R2922	181492	93697-681	RES CMF 1/8W 2% 220R
R2923	181491	93697-379	RES CMF 1/8W 5% 180R
R2924	829010	727832-111	* RES CC 1/4W 5% 10R
R2925	200441	XX80439-730	RES CMF 1/8W 2% 150R
R2926	190531	2821761-101	RES CONTROL RED/BLU DR
R2927	210245	2819434-373	RES CF 1/4W 5% 100R
R2928	190531	2821761-101	RES CONTROL GRN DRIVE
R2929	158491	93697-361	RES CMF 1/8W 5% 33R
R2930	176629	2819434-391	RES CF 1/4W 5% 560R
R2935	190461	93697-688	RES CMF 1/8W 2% 430R
R2938	174344	93697-383	RES CMF 1/8W 5% 270R
R2941	175567	2819434-386	RES CF 1/4W 5% 360R
R2942	162003	93697-393	RES CMF 1/8W 5% 680R
R2943	162003	93697-393	RES CMF 1/8W 5% 680R
R2944	181057	93697-698	RES CMF 1/8W 2% 1.1K
R2945	174344	93697-383	RES CMF 1/8W 5% 270R
R2946	190462	93697-697	RES CMF 1/8W 2% 1K
R2947	829010	993272-349	* RES CFFP 1/4W 5% 10R
R2948	829010	XX30939-360	RES CFFP 1/4W 5% 10R
R2949	174345	93697-387	RES CMF 1/8W 5% 390R
R3101	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3102	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3103	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R3104	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3105	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R3106	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3107	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3108	174361	93697-469	RES CMF 1/8W 5% 1M
R3109	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3110	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3111	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3112	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3113	206380	XX11064-770	RES CMF 1/8W 5% 4.7K
R3114	205349	1B14212-82A	RES CMF 1/10W 5% 8.2K
R3115	174364	93697-721	RES CMF 1/8W 2% 10K
R3116	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3117	174364	93697-721	RES CMF 1/8W 2% 10K
R3118	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3119	175312	2819434-393	RES CF 1/4W 5% 680R
R3120	182822	93697-691	RES CMF 1/8W 2% 560R
R3121	174364	93697-721	RES CMF 1/8W 2% 10K
R3122	192070	1B14213-22A	RES CMF 1/10W 5% 22K
R3123	202069	XX11059-640	RES CF 1/4W 5% 1K
R3125	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3126	192097	1B14212-47A	RES CMF 1/10W 5% 4.7K
R3326	206380	XX11064-770	RES CMF 1/8W 5% 4.7K
R3128	197472	1B14211-56A	RES CMF 1/10W 5% 560R
R3129	197644	1B14211-82A	RES CMF 1/10W 5% 820R
R3130	174348	XX30942-990	RES CMF 1/8W 5% 1K
R3131	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R3132	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R3135	176816	93697-445	RES CMF 1/8W 5% 100K
R3136	174364	93697-721	RES CMF 1/8W 2% 10K
R3138	174367	93697-729	RES CMF 1/8W 2% 22K
R3139	202069	XX11059-640	RES CF 1/4W 5% 1K
R3140	202069	XX11059-640	RES CF 1/4W 5% 1K
R3141	181486	93697-673	RES CMF 1/8W 2% 100R
R3142	176816	93697-445	RES CMF 1/8W 5% 100K
R3143	190462	93697-697	RES CMF 1/8W 2% 1K
R3201	218508	XX70434-200	RES CMF 1/10W 5% 100R
R3301	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3302	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3303	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3304	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3305	174364	93697-721	RES CMF 1/8W 2% 10K
R3306	197633	1B14213-47A	RES CMF 1/10W 5% 47K
R3307	205245	1B14203-27A	RES CMF 1/10W 2% 27K
R3308	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3309	200178	93697-718	RES CMF 1/8W 2% 7.5K
R3310	175040	2819434-365	* RES CF 1/4W 5% 47R
R3312	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3313	192097	1B14212-47A	RES CMF 1/10W 5% 4.7K
R3314	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3317	175322	2819434-437	RES CF 1/4W 5% 47K
R3318	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3319	175046	2819434-432	RES CF 1/4W 5% 330R
R3320	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3321	179316	2819434-416	RES CF 1/4W 5% 6.2K
R3324	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3325	192097	1B14212-47A	RES CMF 1/10W 5% 4.7K
R3326	174350	93697-413	RES CMF 1/8W 5% 4.7K
R3327	174363	93697-479	RES CMF 1/8W 5% 2.7M
R3329	202069	XX11059-640	RES CF 1/4W 5% 1K
R3330	205564	XX50883-010	RES CF 1/4W 5% 15K
R3331	174348	93697-397	RES CMF 1/8W 5% 1K
R3332	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3333	193886	2819434-436	RES CF 1/4W 5% 43K
R3334	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R3335	205353	1B14203-13A	RES CMF 1/10W 2% 13K
R3336	175413	2819434-413	RES CF 1/4W 5% 4.7K
R3337	192100	XX20471-950	RES CMF 1/10W 5% 1K
R3338	175046	2819434-432	RES CF 1/4W 5% 330R
R3339	202069	XX11059-640	RES CF 1/4W 5% 1K
R3340	197643	1B14212-91A	RES CMF 1/10W 5% 9.1K
R3341	162005	93697-442	RES CMF 1/8W 5% 75K
R3342	200180	1B14203-91A	RES CMF 1/10W 2% 91K
R3343	178285	93697-724	RES CMF 1/8W 2% 13K
R3344	174365	93697-423	RES CMF 1/8W 5% 12K
R3345	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3346	200181	2821716-152	RES CONTROL SUB-BRITE
R3347	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R3348	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3349	202069	XX11059-640	RES CF 1/4W 5% 1K
R3351	181062	XX11064-820	RES CMF 1/8W 5% 51K
R3352	175317	2819434-421	RES CF 1/4W 5% 10K
R3353	176648	2819434-407	RES CF 1/4W 5% 2.7K
R3601	175317	2819434-421	RES CF 1/4W 5% 10K
R3602	174364	93697-721	RES CMF 1/8W 2% 10K
R3603	181491	93697-379	RES CMF 1/8W 5% 180R
R3604	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R3605	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R4001	200444	1B08739-18A	* RES WW 15W 10% 1.8R
R4002	183127	2817488-003	* RES CF 1/2W 5% 2.7M (SEE NOTE@)
R4002	217662	XX15041-110	* RES CC 1/2W 10% 2.7M (SEE NOTE@)
R4003	200182	2874125-433	RES MF 2W 5% 33K
R4101	175054	2819434-429	RES CF 1/4W 5% 22K
R4102	175413	2819434-713	RES CF 1/4W 2% 4.7K
R4103	175315	2819434-438	* RES CF 1/4W 5% 51K
R4104	175367	2819434-701	RES CF 1/4W 2% 1.5K
R4105	179238	2819434-442	RES CF 1/4W 5% 75K
R4107	175374	2819435-357	RES CF 1/2W 5% 22R
R4108	203097	2819434-696	RES CF 1/4W 2% 910R
R4109	203745	2819434-700	RES CF 1/4W 2% 1.3K CTC169PE,PH,PJ
R4109	202069	XX11059-640	RES CF 1/4W 5% 1K CTC169PF,PG,PK,PM
R4110	200183	1B08228-18A	* RES WW 2W 5% .18R
R4113	190525	2821716-301	RES CONTROL STBY ADJ
R4114	176506	990401-464	RES MF 1/4W 1% 45.3K
R4115	200184	990401-350	RES MF 1/4W 1% 3240R
R4116			* RES CONTROL PART OF CR4111 B+ REG KIT
R4117	175040	2819434-365	RES CF 1/4W 5% 47R
R4119	200185	1B08521-33A	* RES WW 7W 5% 330R
R4120	200186	2819434-649	RES CF 1/4W 2% 10R (SEE NOTE@)
R4120	829010	XX90571-220	RES CF 1/4W 2% 10R (SEE NOTE@)

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R4125	176796	2819435-373	RES CF 1/2W 5% 100R
R4126	206016	1B08329-68A	* RES WW 3W 5% 6.8R
R4127	175367	2819434-401	RES CF 1/4W 5% 1.5K
R4128	177535	2819434-387	RES CF 1/4W 5% 390R
R4129	180369	93697-404	RES CMF 1/8W 5% 2K
R4135	175317	2819434-421	RES CF 1/4W 5% 10K
R4136	175308	2819434-399	RES CF 1/4W 5% 1.2K
R4137	202069	XX11059-640	RES CF 1/4W 5% 1K
R4139	174364	93697-721	RES CMF 1/8W 2% 10K
R4140	181494	93697-443	RES CMF 1/8W 5% 82K
R4142	175042	2819434-405	RES CF 1/4W 5% 2.2K
R4143	175042	2819434-405	RES CF 1/4W 5% 2.2K
R4144	175373	2819435-403	RES CF 1/2W 5% 1.8K
R4145	174364	93697-721	RES CMF 1/8W 2% 10K
R4146	206380	XX11064-770	RES CMF 1/8W 5% 4.7K
R4147	179259	2874124-429	RES MFFP 1W 5% 22K
R4148	200189	990401-471	RES MF 1/4W 1% 53.6K
R4149	831A12	2874124-327	* RES MFFP 1W 5% 1.2R
R4150	174340	93697-357	RES CMF 1/8W 5% 22R
R4151	176814	93697-395	RES CMF 1/8W 5% 820R
R4152	182628	93697-689	RES CMF 1/8W 2% 470R
R4302	181496	93697-416	RES CMF 1/8W 5% 6.2K
R4303	194914	1B14211-33A	RES CMF 1/10W 5% 330R (SEE NOTE@)
R4303	195929	XX50886-540	RES CMF 1/10W 5% 330R (SEE NOTE@)
R4306	200417	2821761-153	RES CONTROL CENTERING
R4307	179318	XX11059-920	RES CF 1/4W 2% 3K
R4308	181485	93697-375	RES CMF 1/8W 2% 120R
R4309	210245	2819434-373	RES CF 1/4W 5% 100R
R4310	179798	2819435-395	RES CF 1/2W 5% 820R
R4311	175363	2819434-680	RES CF 1/4W 2% 200R
R4312	175040	2819434-365	* RES CF 1/4W 5% 47R
R4313	176796	2819435-373	RES CF 1/2W 5% 100R
R4314	200192	2819435-363	* RES CF 1/2W 5% 39R
R4315	191146	2819435-419	RES CF 1/2W 5% 8.2K
R4317	177535	2819434-387	RES CF 1/4W 5% 390R
R4318	181491	93697-379	RES CMF 1/8W 5% 180R
R4319	175325	2819434-373	RES CF 1/4W 5% 100R (SEE NOTE@)
R4319	175324	XX20469-450	RES CF 1/4W 2% 220R (SEE NOTE@)
R4321	175044	2819434-445	RES CF 1/4W 5% 100K
R4322	218508	XX70434-200	RES CMF 1/10W 5% 100R
R4323	175363	2819434-680	RES CF 1/4W 2% 200R
R4324	175418	93697-714	RES CMF 1/8W 2% 5.1K
R4326	195938	1B14202-33A	RES CMF 1/10W 2% 330R
R4327	175360	2819434-725	RES CF 1/4W 2% 15K
R4328	175418	93697-714	RES CMF 1/8W 2% 5.1K
R4401	176651	2819435-381	* RES CF 1/2W 5% 220R
R4402	181098	2819435-349	* RES CF 1/2W 5% 10R
R4404	175364	2819435-393	RES CF 1/2W 5% 680R
R4406	175364	2819435-393	RES CF 1/2W 5% 680R
R4407	175413	2819434-414	RES CF 1/4W 5% 4.7K
R4408	175417	2819434-414	RES CF 1/4W 5% 5.1K
R4409	175042	2819434-405	RES CF 1/4W 5% 2.2K
R4501	175413	2819434-713	RES CF 1/4W 2% 4.7K
R4503	178299	93697-415	RES CMF 1/8W 5% 5.6K
R4504	175312	2819434-393	RES CF 1/4W 5% 680R
R4505	200445	993291-330	RES MF 1/2W 5% 1.6R
R4506	200194	2819435-390	RES CF 1/2W 5% 510R
R4507	177816	2819434-459	RES CF 1/4W 5% 390K
R4508	179955	2819434-435	RES CF 1/4W 5% 39K
R4509	174364	93697-721	RES CMF 1/8W 2% 10K
R4510	174364	93697-721	RES CMF 1/8W 2% 10K
R4511	200178	XX80439-780	RES CMF 1/8W 2% 7.5K
R4512	174349	XX50885-650	RES CMF 1/8W 5% 2.7K
R4513	181485	93697-375	RES CMF 1/8W 2% 120R
R4514	181062	XX11064-820	RES CMF 1/8W 5% 51K
R4515	205346	1B14212-56A	RES CMF 1/10W 5% 5.6K
R4516	176650	2819434-447	RES CF 1/4W 5% 120K
R4517	202069	XX11059-640	RES CF 1/4W 5% 1K
R4518	829147	993272-389	* RES CFFP 1/4W 5% 470R
R4519	176793	2819435-389	RES CF 1/2W 5% 470R
R4520	176547	2819435-411	* RES CF 1/2W 5% 3.9K
R4521	174364	XX70433-290	RES CMF 1/8W 2% 10K
R4522	200417	2821761-153	RES CONTROL VERT HEIGHT
R4523	180029	2874124-421	* RES MFFP 1W 5% 10K
R4524	197633	1B14213-47A	RES CMF 1/10W 5% 47K
R4525	178285	XX70433-300	RES CMF 1/8W 2% 13K
R4526	200178	93697-718	RES CMF 1/8W 2% 7.5K
R4539	181494	93697-443	RES CMF 1/8W 5% 82K
R4542	204315	2819435-414	RES CF 1/2W 5% 5.1K
R4543	181075	93697-461	RES CMF 1/8W 5% 470K
R4544	200197	993272-341	* RES CFFP 1/4W 5% 4.7R
R4545	190456	XX11064-850	RES CMF 1/8W 5% 200K
R4546	180816	XX60443-860	RES CMF 1/8W 2% 120K
R4547	192084	XX50886-630	RES CMF 1/10W 5% 100K (SEE NOTE@)
R4547	206005	XX50886-620	RES CMF 1/10W 5% 39K (SEE NOTE@)
R4548	830215	XX30939-810	RES CF 1/2W 5% 1.5K
R4602	175312	2819434-393	RES CF 1/4W 5% 680R
R4604	176457	2819434-469	RES CF 1/4W 5% 1M
R4701	830010	993273-349	* RES CFFP 1/2W 5% 10R
R4703	195730	1B08329-33A	* RES WW 3W 5% 3.3R
R4705	176647	2819434-392	RES CF 1/4W 5% 620R
R4710	829012	993272-351	* RES CF 1/4W 2% 12R
R4711	175354	2819434-384	RES CF 1/4W 5% 300R
R4712	175314	2819434-433	RES CF 1/4W 5% 33K
R4713	830368	993114-569	* RES CF 1/2W 2% 68K
R4714	210245	2819434-373	RES CF 1/4W 5% 100R
R4715	175363	2819434-680	RES CF 1/4W 2% 200R
R4716	175312	2819434-693	RES CF 1/4W 2% 680R
R4717	175318	2819434-667	RES CF 1/4W 2% 56R
R4718	181486	93697-673	RES CMF 1/8W 2% 100R
R4719	830147	993273-389	* RES CF 1/2W 5% 470R
R4720	830010	993273-349	* RES CFFP 1/2W 5% 10R
R4803	176816	93697-445	RES CMF 1/8W 5% 100K
R4804	174355	93697-441	RES CMF 1/8W 5% 68K
R4805	181107	2821716-103	RES CONTROL E/W PIN AMP
R4806	176648	2819434-407	RES CF 1/4W 5% 2.7K
R4807	179955	2819434-435	RES CF 1/4W 5% 39K
R4808	181484	93697-403	RES CMF 1/8W 5% 1.8K
R4809	175769	2819435-387	* RES CF 1/2W 5% 390R
R4810	177535	2819434-387	RES CF 1/4W 5% 390R
R4812	176814	XX11064-740	RES CMF 1/8W 5% 820R
R4813	180325	93697-428	RES CMF 1/8W 5% 20K
R4814	180369	93697-404	RES CMF 1/8W 5% 2K
R4815	178299	93697-415	RES CMF 1/8W 5% 5.6K
R4817	175419	2819434-443	RES CF 1/4W 5% 82K
R4818	200200	2874124-406	RES MF 1W 5% 2.4K
R4819	179238	2819434-442	RES CF 1/4W 5% 75K
R4821	175784	2874124-377	* RES MFFP 1W 5% 150R
R4822	205357	XX70434-110	RES CMF 1/10W 2% 22K
R4823	205408	1B14229-00A	RES CMF 1/10W .0R
R4824	205376	1B14204-30A	RES CMF 1/10W 2% 300K
R4825	197471	1B14213-68A	RES CMF 1/10W 5% 68K
R4826	192097	XX30944-310	RES CMF 1/10W 5% 4.7K
R4901	175317	2819434-421	* RES CF 1/4W 5% 10K
R4902	210245	2819434-373	* RES CF 1/4W 5% 100R
R4903	210066	990401-450	* RES CMF 1/4W 1% 32.4K CTC169PE,PF,PG,PH
R4903	151883	XX80437-740	* RES MF 1/4W 1% 27.4K CTC169PJ,PK,PM
R4904	204794	990401-465	RES MF 1/4W 1% 46.4K CTC169PE,PF,PG,PH
R4904	176500	XX50883-790	RES MF 1/4W 1% 41.2K CTC169PJ,PK,PM
R4905	175054	2819434-729	RES CF 1/4W 2% 22K
R4920	175417	2819434-714	RES CF 1/4W 2% 5.1K
R4922	197470	1B14213-20A	RES CMF 1/10W 5% 20K
RT4501	193327	1B15101-01A	RES THERM/VARISTOR
SCR501	194320	1415780-007	SCR
SF2301	200203	1C40002-01A	FILTER ACOUSTIC WAVE
T4101	200204	1C67101-01A	* TRANSFORMER ISO DRIVER
T4102	207885	2G25021-B4C	* TRANSFORMER SMT CTC169PE,PH,PJ
T4102	210896	2G25021-B7B	* TRANSFORMER SMT CTC169PF,PG,PK
T4301	206394	2G32005-501	* TRANSFORMER HORIZ DR/VERT
T4401	226094	2G25038-A2A	* TRANSFORMER IHVT CTC169PE,PF,PG,PH
T4401	237594	2G25038-C1B	* TRANSFORMER IHVT CTC169PJ,PK
T4401	237690	2G25038-D1B	* TRANSFORMER IHVT CTC169PM
U1001	200137	1A51125-01A	* IC SIGNAL DEFL/PROCESS

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
U1401	161079	1421826-001	IC AUDIO SWITCHING (SEE NOTE@)
U1401	218520	XX46035-300	IC AUDIO SWITCHING (SEE NOTE@)
U2601	179729	1421886-001	IC ANALOG COMB (SEE NOTE@)
U2601	182321	XX15043-270	IC ANALOG COMB (SEE NOTE@)
U3101	218817	XX15040-54A	IC DIG MICROPROCESSOR CTC169PE,PF,PG (SEE NOTE@)
U3101	227245	XX15040-54C	IC DIG MICROPROCESSOR CTC169PE,PF,PG,PJ,PK (SEE NOTE @)
U3101	218816	XX15040-53A	IC DIG MICROPROCESSOR CTC169PH (SEE NOTE@)
U3101	227244	XX15040-53C	IC DIG MICROPROCESSOR CTC169PH (SEE NOTE@)
U3200	218818	1F51001-09B	IC EEPROM CTC169PE,PJ
U3200	226155	1F51001-16C	IC EEPROM CTC169PF,PK,PM
U3200	218820	1F51001-11B	IC EEPROM CTC169PG
U3200	218821	1F51001-12B	IC EEPROM CTC169PH
U4101	200419	1A51117-01A *	IC REGULATOR CONTROL
U4501	200420	1A51123-01A	IC VERTICAL SWITCH (SEE NOTE@)
U4501	227357	XX70400-537	IC VERTICAL SWITCH (SEE NOTE@)
U4801	200420	1A51123-01A	IC PINCUSHION
Y2801	161235	2816766-002	CRYSTAL 3.58MHZ
Y3101	217322	XX10047-940	CRYSTAL 8MHZ
Y4301	200210	XX11004-909	RESONATOR
	180857	1448216-003	BEAD, CERAMIC
	202018	6R04012-03B *	BRACKET, SUPPORT BIAS DRIVE
	237596	XX15189-910	CABLE ASY, DYN FOC
	237597	XX15189-930	CABLE ASY, FOC/SCRN
	237593	2G36022-525	CABLE ASY,J1702/J1702A
	237605	2G36013-597	CABLE ASY, J1904/J3404
	237604	2G36013-596	CABLE ASY, J3001/J3408
	233020	2G36013-583	CABLE ASY,J6108/J5001R
	233021	2G36013-584	CABLE ASY,J6107/J5001G
	233022	2G36013-585	CABLE ASY,J6106/J5001B
	237600	2G36013-589	CABLE ASY, J6109/J8201
	237603	2G36013-592	CABLE ASY, J6113/J7017
	237598	2G36013-587	CABLE ASY, J6404/J8203
	237601	2G36013-590	CABLE ASY, J7002/J8204
	237602	2G36013-591	CABLE ASY, J7004/J7020
	237599	2G36013-588	CABLE ASY, J7019/J8202
	173269	2863229-001	CLIP, Q4101/Q4702
	181032	2862928-002	CLIP, Q4401
	227262	8Q19012-04G	HEATSINK, Q4101
	200216	8R10006-01C *	HOUSING, FOCUS
	250045	6R23005-01A *	LENS, LED/LDR
	135255	59149-106	NUT, CONTROL MTG
	210898	6R16021-03B *	OVERLAY, JACK PANEL MAIN
	203754	6R16010-01B *	OVERLAY, JACK PANEL RF SWITCH
	203772	6R16011-01A *	OVERLAY, JACK PANEL TUNER
	204808	6R16012-01B *	OVERLAY, JACK PANEL SVHS
	204807	8R14007-01G *	PANEL, JACK
	139301	1479290-001	RETAINER, BEAD CHAIN
	226701	XX15066-21A	SHIELD, RFI
	233743	XX15093-290	SPRING, GROUNDING IHVT
	154382	1449749-017	SUPPORT, FOR DNR PCB
	204822	1449749-028	SUPPORT, FOR HV REG PCB
	233121	XX15073-360	WIRE TIE, PUSH MOUNT
	154385	2870929-003	WIRE TIE, TWIST END

10W ANALOG AUDIO CBA

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
		2F35039-511 ●	CIRCUIT COMPLETE CTC169BU,BW (INLINE LEAD U1901/2) (USE 2F26017-511)
		2F26020-511 ●	CIRCUIT COMPLETE CTC169BU,BW,PU,PW (INLINE LEAD U1901/2) (USE 2F26017-511)
	212211	2F26017-511 ●	CIRCUIT COMPLETE CTC169BU,BW,PU,PW (OFFSET LEAD U1901/2)
		2F35039-513 ●	CIRCUIT COMPLETE CTC169BT (INLINE LEAD U1901/2) (USE 2F26017-513)
		2F26020-513 ●	CIRCUIT COMPLETE CTC169BT,PA,PT (INLINE LEAD U1901/2) (USE 2F26017-513)
	216809	2F26017-513 ●	CIRCUIT COMPLETE CTC169BT,PA,PE,PJ,PT (OFFSET LEAD U1901/2)
	216801	2F26017-518 ●	CIRCUIT COMPLETE CTC169PD,PH (OFFSET LEAD U1901/2)
C1408	220998	1C30179-10A	CAP LYTC 1UF M 100V
C1409	220998	1C30179-10A	CAP LYTC 1UF M 100V
C1411	193043	1C30230-47A	CAP LYTC 47UF M 25V
C1412	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C1413	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C1414	193043	1C30230-47A	CAP LYTC 47UF M 25V
C1450	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C1451	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C1452	220998	1C30179-10A	CAP LYTC 1UF M 100V
C1453	220998	1C30179-10A	CAP LYTC 1UF M 100V
C1454	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1455	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1456	195924	1C18500-47A	CAPCC 47PF K NPO 50V
C1457	195924	1C18500-47A	CAPCC 47PF K NPO 50V
C1458	195924	1C18500-47A	CAPCC 47PF K NPO 50V
C1459	195924	1C18500-47A	CAPCC 47PF K NPO 50V
C1460	193043	1C30230-47A	CAP LYTC 47UF M 25V
C1461	193043	1C30230-47A	CAP LYTC 47UF M 25V
C1462	207856	1C18671-33A	CAPCC 330PF M X7R 50V
C1463	207856	1C18671-33A	CAPCC 330PF M X7R 510V
C1470	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1471	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1501	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1502	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1515	189981	1C30150-10A	CAP LYTC 10UF M 50V
C1516	189981	1C30150-10A	CAP LYTC 10UF M 50V
C1520	200148	1C18672-47A	CAPCC 4700PF M X7R 50V
C1521	207857	1C18783-47A	CAPCC .047UF M X7R 50V
C1522	200148	1C18672-47A	CAPCC 4700PF M X7R 50V
C1554	207852	2821736-37S	CAPCC .12UF Z Y5V 50V
C1556	207852	2821736-37S	CAPCC .12UF Z Y5V 50V
C1558	190548	2861145-85Z	CAPCC 4700PF K X7R 50V
C1559	190548	2861145-85Z	CAPCC 4700PF K X7R 50V
C1560	216802	XX15000-850	CAP LYTC 10UF M 50V
C1561	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1562	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1563	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1564	208429	XX43392-660	CAP LYTC 47UF M 16V INLINE LEAD U1901/2
C1564	216803	XX15000-860	CAP LYTC 47UF M 50V OFFSET LEAD U1901/02
C1565	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C1570	208429	XX43392-660	CAP LYTC 47UF M 16V INLINE LEAD U1901/2
C1570	216803	XX15000-860	CAP LYTC 47UF M 50V OFFSET LEAD U1901/02
C1572	208429	XX43392-660	CAP LYTC 47UF M 16V INLINE LEAD U1901/2
C1572	216803	XX15000-860	CAP LYTC 47UF M 50V OFFSET LEAD U1901/02
C1573	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C1600	174423	2861146-35Z	CAPCC .01UF K X7R 50V INLINE LEAD U1901/2
C1600	181462	2861148-17S	CAPCC .22UF Z Y5V 50V OFFSET LEAD U1901/02
C1601	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1602	207853	2861147-87S	CAPCC .15UF Z Y5V 50V
C1603	197600	1C18572-10A	CAPCC 1000PF K X7R 50V
C1604	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C1605	160077	1C30178-47A	CAP LYTC .47UF M 100V

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
C1607	153991	1C30130-22A	CAP LYTC 22UF M 25V
C1608	153991	1C30130-22A	CAP LYTC 22UF M 25V
C1609	160077	1C30178-47A	CAP LYTC .47UF M 100V
C1610	160077	1C30178-47A	CAP LYTC .47UF M 100V
C1611	160077	1C30178-47A	CAP LYTC .47UF M 100V
C1612	189981	1C30150-10A	CAP LYTC 10UF M 50V
C1613	151119	1C30179-33A	CAP LYTC 3.3UF M 100V
C1614	153991	1C30130-22A	CAP LYTC 22UF M 25V
C1615	153991	1C30130-22A	CAP LYTC 22UF M 25V
C1616	195691	1C30179-22A	CAP LYTC 2.2UF M 100V (SEE NOTE@)
C1616	190527	2821725-361	CAP LYTC 2.2UF M 50V (SEE NOTE@)
C1617	151119	1C30179-33A	CAP LYTC 3.3UF M 100V (SEE NOTE@)
C1617	190528	2821725-461	CAP LYTC 3.3UF M 50V (SEE NOTE@)
C1618	190499	1C30179-47A	CAP LYTC 4.7UF M 100V (SEE NOTE@)
C1618	190529	2821725-561	CAP LYTC 4.7UF M 50V (SEE NOTE@)
C1619	194581	1C30131-10A	CAP LYTC 100UF M 25V
C1620	153991	1C30130-22A	CAP LYTC 22UF M 25V
C1621	220998	1C30179-10A	CAP LYTC 1UF M 100V
C1622	190551	2861146-75Z	CAPCC .022UF K X7R 50V
C1623	189981	1C30150-10A	CAP LYTC 10UF M 50V
C1624	190551	2861146-75Z	CAPCC .022UF K X7R 50V
C1625	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1625	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C1626	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C1627	176302	1C30111-10A	CAP LYTC 100UF M 10V
C1628	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1852	194581	1C30131-10A	CAP LYTC 100UF M 25V
C1851	200140	1C18793-10A	CAPCC .01UF Z Z5U 50V
C1853	205239	2841245-582	CAPCD .68UF K Z5R 50V
C1854	207859	2841244-572	CAPCD .056UF K Z5R 50V
C1855	205239	2841245-582	CAPCD .68UF K Z5R 50V
C1856	207859	2841244-572	CAPCD .056UF K Z5R 50V
C1857	205240	1C18783-22A	CAPCC .022UF Z 75V 50V
C1858	205242	2841245-542	CAPCD .33UF K Z5R 50V
C1859	205242	2841245-542	CAPCD .33UF K Z5R 50V
C1860	205240	1C18783-22A	CAPCC .022UF Z 75V 50V
C1861	200140	1C18793-10A	CAPCC .01UF Z Z5U 50V
C1862	207860	2841245-512	CAPCD .15UF K Z5R 50V
C1863	207860	2841245-512	CAPCD .15UF K Z5R 50V
C1864	200140	1C18793-10A	CAPCC .01UF Z Z5U 50V
C1865	202908	1C18572-39A	CAPCC 3900PF K X7R 50V
C1866	207861	2841244-582	CAPCD .068UF K Z5R 50V
C1867	205241	1C18673-15A	CAPCC .015UF M X7R 50V
C1868	197600	1C18572-10A	CAPCC 1000PF K X7R 50V
C1869	202909	1C18572-18A	CAPCC 1800PF K X7R 50V
C1870	207862	2841244-542	CAPCD .033UF K Z5R 50V
C1871	200144	1C18572-68A	CAPCC 6800PF K X7R 50V
C1872	204274	1C18401-39A	CAPCC 390PF J NPO 50V
C1873	197600	1C18572-10A	CAPCC 1000PF K X7R 50V
C1874	205241	1C18673-15A	CAPCC .015UF M X7R 50V
C1875	207861	2841244-582	CAPCD .068UF K Z5R 50V
C1876	202908	1C18572-39A	CAPCC 3900PF K X7R 50V
C1877	204274	1C18401-39A	CAPCC 390PF J NPO 50V
C1878	200144	1C18572-68A	CAPCC 6800PF K X7R 50V
C1879	207862	2841244-542	CAPCD .033UF K Z5R 50V
C1880	202909	1C18572-18A	CAPCC 1800PF K X7R 50V
C1881	193340	1C18401-10A	CAPCC 100PF J NPO 50V
C1882	193340	1C18401-10A	CAPCC 100PF J NPO 50V
C1886	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C1901	216804	XX11007-472	CAP LYTC 1UF M 50V
C1902	216804	XX11007-472	CAP LYTC 1UF M 50V
C1903	200140	1C18793-10A	CAPCC .01UF Z Z5U 50V
C1904	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C1905	208429	XX43392-660	CAP LYTC 47UF M 16V INLINE LEAD U1901/2
C1905	216803	XX15000-860	CAP LYTC 47UF M 50V OFFSET LEAD U1901/2
C1917	190721	1C31142-10A	CAP LYTC 1000UF M 35V
C1918	190721	1C31142-10A	CAP LYTC 1000UF 35V
C1919	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1920	195924	1C18500-47A	CAPCC 47PF K NPO 50V INLINE LEAD U1901/2
C1920	181462	2861148-17S	CAPCC .22UF Z Y5V 50V OFFSET LEAD U1901/2
C1921	181462	2861148-17S	CAPCC .22UF Z Y5V 50V

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
C1922	190499	1C30179-47A	CAP LYTC 4.7UF M 100V INLINE LEAD U1901/2
C1922	189981	1C30250-10A	CAP LYTC 10UF M 50V OFFSET LEAD U1901/2
C1923	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1924	181462	2861148-17S	CAPCC .22UF Z Y5V 50V INLINE LEAD U1901/2
C1924	176770	2841245-522	CAP MONO .39UF K 50V OFFSET LEAD U1901/2
C1925	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1926	195924	1C18500-47A	CAPCC 47PF K NPO 50V INLINE LEAD U1901/2
C1926	181462	2861148-17S	CAPCC .22UF Z Y5V 50V OFFSET LEAD U1901/2
C1927	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1928	190499	1C30179-47A	CAP LYTC 4.7UF M 100V INLINE LEAD U1901/2
C1928	189981	1C30250-10A	CAP LYTC 10UF M 50V OFFSET LEAD U1901/2
C1929	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1930	181462	2861148-17S	CAPCC .22UF Z Y5V 50V INLINE LEAD U1901/2
C1930	176770	2841245-522	CAP MONO .39UF K 50V OFFSET LEAD U1901/2
C1931	190721	1C31142-10A	CAP LYTC 1000UF 35V
C1932	190721	1C31142-10A	CAP LYTC 1000UF M 35V
C1933	174423	2861146-35Z	CAPCC .01UF K X7R 50V INLINE LEAD U1901/2
C1933	200140	1C18793-10A	CAPCC .01UF Z Z5U 50V OFFSET LEAD U1901/2
C1934	190529	2821725-561	CAP LYTC 4.7UF M 50V
C1935	190529	2821725-561	CAP LYTC 4.7UF M 50V
C1983	200436	1C30169-68A	CAP LYTC 6.8UF M 63V INLINE LEAD U1901/2 (SEE NOTE@)
C1983	153991	1C30130-22A	CAP LYTC 22UF M 25V INLINE LEAD U1901/2 (SEE NOTE@)
C1983	181462	2861148-17S	CAPCC .22UF Z Y5V 50V OFFSET LEAD U1901/2
C1984	151119	1C30179-33A	CAP LYTC 3.3UF M 100V INLINE LEAD U1901/2
C1984	181462	2861148-17S	CAPCC .22UF Z Y5V 50V OFFSET LEAD U1901/2
C1986	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
CR1502	164717	1471872-006	DIODE
CR1503	164717	1471872-006	DIODE
CR1504	164717	1471872-006	DIODE
CR1901	164030	99201-309	DIODE ZENER 5.1V
CR1902	201133	1A40101-01A	DIODE
CR1903	201133	1A40101-01A	DIODE
CR1904	201133	1A40101-01A	DIODE
CR1905	201133	1A40101-01A	DIODE
CR1912	147015	99203-203	DIODE
CR1913	147015	99203-203	DIODE
FB1401	153328	2843165-004	BEAD
J1302	204287	XX70308-200 *	CONNECTOR 7 PIN DOLBY
J1303	201137	XX10004-980	CONNECTOR 6 PIN DOLBY
J1305	207844	XX10005-240	CONNECTOR 7 PIN DOLBY
J1407	190513	1P21002-31A	JACK PHONO AUD IN 1L CTC169BT,BU,BW,PA, PE,PJ,PT,PU,PW
J1407	203768	1P21011-03A	JACK PHONO AUDIO IN 1L CTC169PD,PH
J1408	190512	1P21002-21A	JACK PHONO AUD IN 1R CTC169BT,BU,BW,PA, PE,PJ,PT,PU,PW
J1408	203767	1P21011-02A	JACK PHONO AUDIO IN 1R CTC169PD,PH
J1409	190513	1P21002-31A	JACK PHONO AUD IN 2L CTC169BT,BU,BW,PA, PE,PJ,PT,PU,PW
J1409	203768	1P21011-03A	JACK PHONO AUDIO IN 2L CTC169PD,PH
J1410	190512	1P21002-21A	JACK PHONO AUD IN 2R CTC169BT,BU,BW,PA, PE,PJ,PT,PU,PW

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
J1410	203767	1P21011-02A	JACK PHONO AUDIO IN 2R CTC169PD,PH
J1411/12	190516	1P21003-33A	JACK DUAL PHONO L AUD OUT/L SEL OUT CTC169BT,BU,BW,PA, PE,PJ,PT,PU,PW
J1411/ 12/19	207847	XX60412-335	JACK PHONO 3 HIGH HIFI L/L SEL OUT/L SURR CTC169PD,PH
J1413/14	190515	1P21003-22A	JACK DUAL PHONO R AUD OUT/R SEL OUT CTC169BT,BU,BW,PA, PE,PJ,PT,PU,PW
J1413/ 14/18	207848	XX80408-578	JACK PHONO 3 HIGH HIFI R/R SEL OUT/R SURR CTC169PD,PH
J1416	207843	XX60306-800	CONNECTOR 3 PIN HEADPH
J1701	207845	XX10005-150	CONNECTOR 6 PIN SRS PWR
J1702	202910	XX10004-990	CONNECTOR 7 PIN SRS I/O
J1903	201161	XX10005-080	CONNECTOR 7 PIN POWER
J1904	250034	XX10004-960 *	CONNECTOR 4 PIN SPKRS STRAIGHT PIN (SEE NOTE@)
J1904	201150	XX70308-100 *	CONNECTOR 4 PIN SPKRS RIGHT ANGLE PIN (SEE NOTE@)
JC202	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC204	181161	93697-005	RES CMF 1/8W 5% .05R
JC206	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC211	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC212	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC213	181161	93697-005	RES CMF 1/8W 5% .05R
JC214	181161	93697-005	RES CMF 1/8W 5% .05R
JC215	181161	93697-005	RES CMF 1/8W 5% .05R
JC216	181161	93697-005	RES CMF 1/8W 5% .05R
JC217	181161	93697-005	RES CMF 1/8W 5% .05R
JC218	181161	93697-005	RES CMF 1/8W 5% .05R
JC219	181161	93697-005	RES CMF 1/8W 5% .05R
JC220	181161	93697-005	RES CMF 1/8W 5% .05R
JC221	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC223	181161	93697-005	RES CMF 1/8W 5% .05R
JC224	181161	93697-005	RES CMF 1/8W 5% .05R
JC225	181161	93697-005	RES CMF 1/8W 5% .05R
JC226	181161	93697-005	RES CMF 1/8W 5% .05R
JC230	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC231	181161	93697-005	RES CMF 1/8W 5% .05R
JC238	181161	93697-005	RES CMF 1/8W 5% .05R
JC241	181161	93697-005	RES CMF 1/8W 5% .05R INLINE LEAD U1901/02
JC241	192065	1B14229-00A	RES CMF 1/10W 10% .0R OFFSET LEAD U1901/02
JC243	181161	93697-005	RES CMF 1/8W 5% .05R
JC245	181161	93697-005	RES CMF 1/8W 5% .05R INLINE LEAD U1901/2
JC245	205408	XX80440-510	RES CMF 1/10W 10% .0R OFFSET LEAD U1901/2
JC246	181161	93697-005	RES CMF 1/8W 5% .05R
JC247	181161	93697-005	RES CMF 1/8W 5% .05R
JC248	181161	93697-005	RES CMF 1/8W 5% .05R
JC250	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC251	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC252	181161	93697-005	RES CMF 1/8W 5% .05R
JC254	181161	93697-005	RES CMF 1/8W 5% .05R
JC255	181161	93697-005	RES CMF 1/8W 5% .05R
JC256	181161	93697-005	RES CMF 1/8W 5% .05R
JC257	181161	93697-005	RES CMF 1/8W 5% .05R
JC259	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC260	181161	93697-005	RES CMF 1/8W 5% .05R
JC262	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC301	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC302	181161	93697-005	RES CMF 1/8W 5% .05R
JC303	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC305	181161	93697-005	RES CMF 1/8W 5% .05R
JC321	181161	93697-005	RES CMF 1/8W 5% .05R
JC330	181161	93697-005	RES CMF 1/8W 5% .05R
JC331	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC334	181161	93697-005	RES CMF 1/8W 5% .05R
JC339	181161	93697-005	RES CMF 1/8W 5% .05R
JC340	181161	93697-005	RES CMF 1/8W 5% .05R
JC341	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC344	181161	93697-005	RES CMF 1/8W 5% .05R
JC348	181161	93697-005	RES CMF 1/8W 5% .05R INLINE LEAD U1901/2
JC348	205408	1B14229-00A	RES CMF 1/10W 10% .0R OFFSET LEAD U1901/2
JC353	181161	93697-005	RES CMF 1/8W 5% .05R
JC355	181161	93697-005	RES CMF 1/8W 5% .05R
JC360	181161	93697-005	RES CMF 1/8W 5% .05R
JC361	205408	1B14229-00A	RES CMF 1/10W 10% .0R INLINE LEAD U1901/2
JC361	181161	93697-005	RES CMF 1/8W 5% .05R OFFSET LEAD U1901/2
JC362	181161	93697-005	RES CMF 1/8W 5% .05R
JC363	181161	93697-005	RES CMF 1/8W 5% .05R
JC366	181161	93697-005	RES CMF 1/8W 5% .05R
JC368	181161	93697-005	RES CMF 1/8W 5% .05R
JC370	181161	93697-005	RES CMF 1/8W 5% .05R
JC373	181161	93697-005	RES CMF 1/8W 5% .05R
JC374	181161	93697-005	RES CMF 1/8W 5% .05R
JC375	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC376	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC377	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC378	181161	93697-005	RES CMF 1/8W 5% .05R
JC401	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC402	181161	93697-005	RES CMF 1/8W 5% .05R
JC403	181161	93697-005	RES CMF 1/8W 5% .05R
JC405	181161	93697-005	RES CMF 1/8W 5% .05R
JC406	181161	93697-005	RES CMF 1/8W 5% .05R
JC408	181161	93697-005	RES CMF 1/8W 5% .05R
JC409	181161	93697-005	RES CMF 1/8W 5% .05R
JC412	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC413	181161	93697-005	RES CMF 1/8W 5% .05R
JC419	181161	93697-005	RES CMF 1/8W 5% .05R
JC420	181161	93697-005	RES CMF 1/8W 5% .05R
JC421	181161	93697-005	RES CMF 1/8W 5% .05R
JC425	181161	93697-005	RES CMF 1/8W 5% .05R
JC426	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC440	181161	93697-005	RES CMF 1/8W 5% .05R
JC449	181161	93697-005	RES CMF 1/8W 5% .05R
JC450	181161	93697-005	RES CMF 1/8W 5% .05R
JC501	181161	93697-005	RES CMF 1/8W 5% .05R
JC601	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC602	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC603	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC908	181161	93697-005	RES CMF 1/8W 5% .05R
JC912	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC914	205408	1B14229-00A	RES CMF 1/10W 10% .0R
JC918	205408	1B14229-00A	RES CMF 1/10W 10% .0R
Q1400	215495	1417500-001	TRANSISTOR + VOLT REG
Q1401	215496	XX30946-660	TRANSISTOR - VOLT REG
Q1402	215495	1417500-001	TRANSISTOR TOP OUTPUT
Q1403	215496	XX30946-660	TRANSISTOR BOT OUTPUT
Q1404	215495	1417500-001	TRANSISTOR TOP OUTPUT
Q1405	215496	XX30946-660	TRANSISTOR BOT OUTPUT
Q1406	215496	XX30946-660	TRANSISTOR BUFFER
Q1407	215496	XX30946-660	TRANSISTOR BUFFER
Q1500	215496	XX30946-660	TRANSISTOR EXP 12V SW
Q1501	215495	1417500-001	TRANSISTOR BUFFER
Q1502	215495	1417500-001	TRANSISTOR BUFFER
Q1503	215495	1417500-001	TRANSISTOR EXP SWITCH
Q1504	215495	1417500-001	TRANSISTOR TURN OFF SW
Q1507	215496	XX30946-660	TRANSISTOR L FOLLOWER
Q1551	192849	1417411-007	TRANSISTOR EXPANDER
Q1601	215495	1417500-001	TRANSISTOR INTER MUTE (SEE NOTE@)
Q1601	215496	XX30946-660	TRANSISTOR INTER MUTE (SEE NOTE@)
Q1603	215495	1417500-001	TRANSISTOR SPKR MUTE
Q1850	215495	1417500-001	TRANSISTOR ACTIVE FILT
Q1851	215495	1417500-001	TRANSISTOR ACTIVE FILT
Q1852	215495	1417500-001	TRANSISTOR ACTIVE FILT
Q1853	215495	1417500-001	TRANSISTOR ACTIVE FILT
Q1854	215495	1417500-001	TRANSISTOR ACTIVE FILT
Q1855	215495	1417500-001	TRANSISTOR ACTIVE FILT
Q1856	215495	1417500-001	TRANSISTOR ACTIVE FILT
Q1857	215495	1417500-001	TRANSISTOR ACTIVE FILT
Q1858	215495	1417500-001	TRANSISTOR ACTIVE FILT
Q1859	215495	1417500-001	TRANSISTOR ACTIVE FILT
Q1860	215495	1417500-001	TRANSISTOR ACTIVE FILT
Q1861	215495	1417500-001	TRANSISTOR ACTIVE FILT
Q1901	215495	1417500-001	TRANSISTOR INTER MUTE

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
Q1903	215495	1417500-001	TRANSISTOR SLOW START (SEE NOTE@)
Q1903	216805	XX15000-250	TRANSISTOR SLOW START (SEE NOTE@)
Q1904	215496	XX30946-660	TRANSISTOR SLOW START (SEE NOTE@)
Q1904	216805	XX15000-250	TRANSISTOR SLOW START (SEE NOTE@)
Q1905	215495	1417500-001	TRANSISTOR BIAS
Q1906	215495	1417500-001	TRANSISTOR BIAS
Q1915	215495	1417500-001	TRANSISTOR DC AMP
R1301	197473	1B14211-51A	RES CMF 1/10W 5% 510R
R1302	197473	1B14211-51A	RES CMF 1/10W 5% 510R
R1303	192098	1B14210-47A	RES CMF 1/10W 5% 47R
R1304	192098	1B14210-47A	RES CMF 1/10W 5% 47R
R1305	176816	93697-445	RES CMF 1/8W 5% 100K
R1306	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1409	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1410	176632	727832-167 *	RES CC 1/4W 2% 2.2K
R1411	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1412	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1413	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1414	176632	727832-167 *	RES CC 1/4W 2% 2.2K
R1415	174348	93697-397	RES CMF 1/8W 5% 1K
R1416	174348	93697-397	RES CMF 1/8W 5% 1K
R1419	175055	2819434-397	RES CF 1/4W 5% 1K
R1420	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1421	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1422	197633	1B14213-47A	RES CMF 1/10W 5% 47K
R1423	174348	93697-397	RES CMF 1/8W 5% 1K INLINE LEAD U1901/2
R1423	192100	1B14212-10A	RES CMF 1/10W 5% 1K OFFSET LEAD U1901/2
R1424	174348	93697-397	RES CMF 1/8W 5% 1K INLINE LEAD U1901/2
R1424	192100	1B14212-10A	RES CMF 1/10W 5% 1K OFFSET LEAD U1901/2
R1425	201143	1B14212-62A	RES CMF 1/10W 5% 6.2K
R1426	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1427	201143	1B14212-62A	RES CMF 1/10W 5% 6.2K
R1428	192087	1B14212-68A	RES CMF 1/10W 5% 6.8K
R1429	176632	727832-167 *	RES CC 1/4W 2% 2.2K
R1430	192087	1B14212-68A	RES CMF 1/10W 5% 6.8K
R1431	176632	727832-167 *	RES CC 1/4W 2% 2.2K
R1433	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1434	197633	1B14213-47A	RES CMF 1/10W 5% 47K
R1435	829115	993272-377 *	RES CFFP 1/4W 5% 150R
R1436	192086	1B14211-15A	RES CMF 1/10W 5% 150R
R1437	192087	1B14212-68A	RES CMF 1/10W 5% 6.8K
R1438	201143	1B14212-62A	RES CMF 1/10W 5% 6.2K
R1439	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1440	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1441	201143	1B14212-62A	RES CMF 1/10W 5% 6.2K
R1444	192086	1B14211-15A	RES CMF 1/10W 5% 150R
R1445	192087	1B14212-68A	RES CMF 1/10W 5% 6.8K
R1446	829115	993272-377 *	RES CFFP 1/4W 5% 150R
R1447	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1448	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1449	175325	2819434-373	RES CF 1/4W 5% 100R
R1451	192093	1B14214-22A	RES CMF 1/10W 5% 220K
R1452	108865	727832-159 *	RES CC 1/4W 2% 1K INLINE LEAD U1901/2
R1452	176632	727832-167 *	RES CC 1/4W 2% 2.2K OFFSET LEAD U1901/2
R1453	192093	1B14214-22A	RES CMF 1/10W 5% 220K
R1454	108865	727832-159 *	RES CC 1/4W 2% 1K INLINE LEAD U1901/2
R1454	176632	727832-167 *	RES CC 1/4W 2% 2.2K OFFSET LEAD U1901/2
R1455	192093	1B14214-22A	RES CMF 1/10W 5% 220K
R1456	108865	727832-159 *	RES CC 1/4W 2% 1K INLINE LEAD U1901/2
R1456	176632	727832-167 *	RES CC 1/4W 2% 2.2K OFFSET LEAD U1901/2
R1457	174353	93697-453	RES CMF 1/8W 5% 220K
R1458	108865	727832-159 *	RES CC 1/4W 2% 1K INLINE LEAD U1901/2
R1458	176632	727832-167 *	RES CC 1/4W 2% 2.2K OFFSET LEAD U1901/2
R1459	175317	2819434-421	RES CF 1/4W 5% 10K
R1460	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1461	197633	1B14213-47A	RES CMF 1/10W 5% 47K
R1462	197633	1B14213-47A	RES CMF 1/10W 5% 47K
R1464	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1466	194927	1B14211-10A	RES CMF 1/10W 5% 100R
R1467	194927	1B14211-10A	RES CMF 1/10W 5% 100R
R1468	194927	1B14211-10A	RES CMF 1/10W 5% 100R
R1469	176818	93697-373	RES CMF 1/8W 5% 100R
R1470	194927	1B14211-10A	RES CMF 1/10W 5% 100R
R1471	175325	2819434-373	RES CF 1/4W 5% 100R
R1472	194927	1B14211-10A	RES CMF 1/10W 5% 100R
R1474	194927	1B14211-10A	RES CMF 1/10W 5% 100R
R1475	194927	1B14211-10A	RES CMF 1/10W 5% 100R
R1476	194927	1B14211-10A	RES CMF 1/10W 5% 100R
R1479	175317	2819434-421	RES CF 1/4W 5% 10K
R1480	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1481	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1482	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1483	175325	2819434-373	RES CF 1/4W 5% 100R
R1484	175325	2819434-373	RES CF 1/4W 5% 100R
R1487	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1488	176632	727832-167 *	RES CC 1/4W 2% 2.2K
R1489	205354	1B14213-15A	RES CMF 1/10W 5% 15K
R1490	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1491	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1492	205354	1B14213-15A *	RES CMF 1/10W 5% 15K
R1493	174364	93697-421	RES CMF 1/8W 5% 10K
R1494	176632	727832-167 *	RES CC 1/4W 2% 2.2K
R1495	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1496	192097	1B14212-47A	RES CMF 1/10W 5% 4.7K
R1497	194927	1B14211-10A	RES CMF 1/10W 5% 100R
R1498	174348	93697-397	RES CMF 1/8W 5% 1K
R1499	192097	1B14212-47A	RES CMF 1/10W 5% 4.7K
R1512	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1513	174364	93697-421	RES CMF 1/8W 5% 10K
R1517	176818	93697-373	RES CMF 1/8W 5% 100R
R1518	176818	93697-373	RES CMF 1/8W 5% 100R
R1519	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1520	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1521	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1522	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1523	197470	1B14213-20A	RES CMF 1/10W 5% 20K
R1524	250060	1B14226-10A	RES CMF 1/10W 10% 10M
R1525	174364	93697-421	RES CMF 1/8W 5% 10K
R1526	197470	1B14213-20A	RES CMF 1/10W 5% 20K
R1527	175325	2819434-373	RES CF 1/4W 5% 100R
R1528	176818	93697-373	RES CMF 1/8W 5% 100R
R1529	176818	93697-373	RES CMF 1/8W 5% 100R
R1530	175325	2819434-373	RES CF 1/4W 5% 100R
R1541	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1544	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1545	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1546	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1550	197470	1B14213-20A	RES CMF 1/10W 5% 20K
R1551	180325	93697-428	RES CMF 1/8W 5% 20K
R1552	180325	93697-428	RES CMF 1/8W 5% 20K
R1553	197470	1B14213-20A	RES CMF 1/10W 5% 20K
R1554	176647	2819434-392	RES CF 1/4W 5% 620R (SEE NOTE@)
R1554	175042	2819434-405	RES CF 1/4W 5% 2.2K (SEE NOTE@)
R1557	176634	2819434-417	RES CF 1/4W 5% 6.8K
R1558	175317	2819434-421	RES CF 1/4W 5% 10K
R1559	176648	2819434-407	RES CF 1/4W 5% 2.7K
R1560	179318	2819434-408	RES CF 1/4W 5% 3K
R1561	175325	2819434-373	RES CF 1/4W 5% 100R
R1562	197907	1B14212-39A	RES CMF 1/10W 5% 3.9K
R1565	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1566	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1570	180325	93697-428	RES CMF 1/8W 5% 20K
R1571	175351	2819434-428	RES CF 1/4W 5% 20K
R1574	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1575	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1580	205302	93697-755	RES CMF 1/8W 2% 270K
R1581	162004	93697-439	RES CMF 1/8W 5% 56K
R1582	205302	93697-455	RES CMF 1/8W 5% 270K
R1583	181062	93697-438	RES CMF 1/8W 5% 51K
R1601	829010	993272-349 *	RES CFFP 1/4W 5% 10R
R1602	197903	1B14212-18A	RES CMF 1/10W 5% 1.8K
R1603	174365	93697-423	RES CMF 1/8W 5% 12K
R1604	191389	2821716-203	RES CONTROL STEREO SAP FILTERS
R1605	207836	1B14213-75A	RES CMF 1/10W 5% 75K

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R1606	190526	2821716-503	RES CONTROL BB FILTERS
R1607	207835	1B14214-18A	RES CMF 1/10W 5% 180K
R1608	193061	93697-431	RES CMF 1/8W 5% 27K
R1609	181108	2821716-104	RES CONTROL WB NULL
R1610	191136	93697-444	RES CMF 1/8W 5% 91K
R1611	195951	2821716-254	RES CONTROL HB NULL
R1613	205245	1B14213-27A	RES CMF 1/10W 5% 27K
R1615	205244	1B14213-82A	RES CMF 1/10W 5% 82K (SEE NOTE@)
R1615	191136	XX30943-040	RES CMF 1/8W 5% 91K (SEE NOTE@)
R1616	190526	2821716-503	RES CONTROL STEREO VCO (GREEN KNOB) (SEE NOTE@)
R1616	190526	2821716-503	RES CONTROL STEREO VCO (ORANGE KNOB) (SEE NOTE@)
R1617	174348	93697-397	RES CMF 1/8W 5% 1K
R1618	175325	2819434-373	RES CF 1/4W 5% 100R
R1620	174348	93697-397	RES CMF 1/8W 5% 1K
R1621	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1622	175055	2819434-397	RES CF 1/4W 5% 1K
R1623	175317	2819434-421	RES CF 1/4W 5% 10K
R1624	197907	1B14212-39A	RES CMF 1/10W 5% 3.9K
R1625	197470	1B14213-20A	RES CMF 1/10W 5% 20K
R1630	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1631	176816	93697-445	RES CMF 1/8W 5% 100K
R1632	176816	93697-445	RES CMF 1/8W 5% 100K
R1633	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1636	176367	93697-365	RES CMF 1/8W 5% 47R
R1640	205354	1B14213-15A	RES CMF 1/10W 5% 15K
R1641	192835	93697-425	RES CMF 1/8W 5% 15K
R1642	192835	93697-425	RES CMF 1/8W 5% 15K
R1643	205354	1B14213-15A	RES CMF 1/10W 5% 15K
R1644	205354	1B14213-15A	RES CMF 1/10W 5% 15K
R1645	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1646	174364	93697-421	RES CMF 1/8W 5% 10K
R1647	174364	93697-421	RES CMF 1/8W 5% 10K
R1648	174364	93697-421	RES CMF 1/8W 5% 10K
R1649	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1650	176818	93697-373	RES CMF 1/8W 5% 100R INLINE LEAD U1901/2
R1650	218508	XX70434-200	RES CMF 1/10W 5% 100R OFFSET LEAD U1901/2
R1651	205360	1B14213-33A	RES CMF 1/10W 5% 33K INLINE LEAD U1901/2
R1651	176813	XX11064-810	RES CMF 1/8W 5% 33K OFFSET LEAD U1901/2
R1653	205360	1B14213-33A	RES CMF 1/10W 5% 33K
R1654	175055	2819434-397	RES CF 1/4W 5% 1K
R1655	175772	2821523-337	* RES MFFP 1/2W 5% 3.3R
R1656	829010	993272-349	* RES CFFP 1/4W 5% 10R
R1690	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1691	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1691	174348	93697-397	RES CMF 1/8W 5% 1K
R1692	174348	93697-397	RES CMF 1/8W 5% 1K
R1693	175055	2819434-397	RES CF 1/4W 5% 1K
R1694	175055	2819434-397	RES CF 1/4W 5% 1K
R1695	175055	2819434-397	RES CF 1/4W 5% 1K
R1696	174348	93697-397	RES CMF 1/8W 5% 1K
R1697	174348	93697-397	RES CMF 1/8W 5% 1K
R1698	175055	2819434-397	RES CF 1/4W 5% 1K
R1850	192087	1B14212-68A	RES CMF 1/10W 5% 6.8K
R1851	192087	1B14212-68A	RES CMF 1/10W 5% 6.8K
R1852	192087	1B14212-68A	RES CMF 1/10W 5% 6.8K
R1853	178281	93697-417	RES CMF 1/8W 5% 6.8K
R1854	192087	1B14212-68A	RES CMF 1/10W 5% 6.8K
R1855	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1856	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1857	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1858	181484	93697-403	RES CMF 1/8W 5% 1.8K INLINE LEAD U1901/02
R1858	197903	1B14212-18A	RES CMF 1/10W 5% 1.8K OFFSET LEAD U1901/02
R1859	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1860	181484	93697-403	RES CMF 1/8W 5% 1.8K
R1861	205244	1B14213-82A	RES CMF 1/10W 5% 82K
R1862	192082	1B14212-15A	RES CMF 1/10W 5% 1.5K
R1863	200169	1B14213-12A	RES CMF 1/10W 5% 12K
R1864	205244	1B14213-82A	RES CMF 1/10W 5% 82K
R1865	192082	1B14212-15A	RES CMF 1/10W 5% 1.5K
R1866	200169	1B14213-12A	RES CMF 1/10W 5% 12K
R1867	197471	1B14213-68A	RES CMF 1/10W 5% 68K
R1868	194920	1B14212-12A	RES CMF 1/10W 5% 1.2K
R1869	200169	1B14213-12A	RES CMF 1/10W 5% 12K
R1870	197471	1B14213-68A	RES CMF 1/10W 5% 68K
R1871	194920	1B14212-12A	RES CMF 1/10W 5% 1.2K
R1872	200169	1B14213-12A	RES CMF 1/10W 5% 12K
R1873	197471	1B14213-68A	RES CMF 1/10W 5% 68K
R1874	194920	1B14212-12A	RES CMF 1/10W 5% 1.2K
R1875	200169	1B14213-12A	RES CMF 1/10W 5% 12K
R1876	197471	1B14213-68A	RES CMF 1/10W 5% 68K
R1877	194920	1B14212-12A	RES CMF 1/10W 5% 1.2K
R1878	200169	1B14213-12A	RES CMF 1/10W 5% 12K
R1879	197471	1B14213-68A	RES CMF 1/10W 5% 68K
R1880	194920	1B14212-12A	RES CMF 1/10W 5% 1.2K
R1881	200169	1B14213-12A	RES CMF 1/10W 5% 12K
R1882	197471	1B14213-68A	RES CMF 1/10W 5% 68K
R1883	194920	1B14212-12A	RES CMF 1/10W 5% 1.2K
R1884	200169	1B14213-12A	RES CMF 1/10W 5% 12K
R1885	174355	93697-441	RES CMF 1/8W 5% 68K
R1886	194920	1B14212-12A	RES CMF 1/10W 5% 1.2K
R1887	174365	93697-423	RES CMF 1/8W 5% 12K
R1888	197471	1B14213-68A	RES CMF 1/10W 5% 68K
R1889	194920	1B14212-12A	RES CMF 1/10W 5% 1.2K
R1890	200169	1B14213-12A	RES CMF 1/10W 5% 12K
R1891	197471	1B14213-68A	RES CMF 1/10W 5% 68K
R1892	194920	1B14212-12A	RES CMF 1/10W 5% 1.2K
R1893	200169	1B14213-12A	RES CMF 1/10W 5% 12K
R1894	197471	1B14213-68A	RES CMF 1/10W 5% 68K
R1895	194920	1B14212-12A	RES CMF 1/10W 5% 1.2K
R1896	200169	1B14213-12A	RES CMF 1/10W 5% 12K
R1897	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1898	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1899	192087	1B14212-68A	RES CMF 1/10W 5% 6.8K
R1901	175315	2819434-438	RES CF 1/4W 5% 51K INLINE LEAD U1901/2
R1901	197622	1B14213-51A	RES CMF 1/10W 5% 51K OFFSET LEAD U1901/2
R1902	176816	93697-445	RES CMF 1/8W 5% 100K
R1903	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1905	155007	93697-399	RES CMF 1/8W 5% 1.2K
R1906	192096	1B14212-22A	RES CMF 1/10W 5% 2.2K
R1907	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1908	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1909	192096	1B14212-22A	RES CMF 1/10W 5% 2.2K
R1911	175741	93697-349	RES CMF 1/8W 5% 10R INLINE LEAD U1901/2
R1911	180430	2874124-341	RES MFFP 1W 5% 4.7R OFFSET LEAD U1901/2
R1912	175044	2819434-445	RES CF 1/4W 5% 100K INLINE LEAD U1901/2
R1912	175054	2819434-429	RES CF 1/4W 5% 22K OFFSET LEAD U1901/2
R1913	174349	93697-407	RES CMF 1/8W 5% 2.7K INLINE LEAD U1901/2
R1913	205339	XX70434-210	RES CMF 1/10W 5% 620R OFFSET LEAD U1901/2
R1914	176816	93697-445	RES CMF 1/8W 5% 100K INLINE LEAD U1901/2
R1914	174367	93697-429	RES CMF 1/8W 5% 22K OFFSET LEAD U1901/2
R1915	175741	93697-349	RES CMF 1/8W 5% 10R INLINE LEAD U1901/2
R1915	180430	2874124-341	RES MFFP 1W 5% 4.7R OFFSET LEAD U1901/2
R1916	175044	2819434-445	RES CF 1/4W 5% 100K INLINE LEAD U1901/2
R1916	192070	1B14213-22A	RES CMF 1/10W 5% 22K OFFSET LEAD U1901/2
R1917	174349	93697-407	RES CMF 1/8W 5% 2.7K INLINE LEAD U1901/2
R1917	205339	XX70434-210	RES CMF 1/10W 5% 620R OFFSET LEAD U1901/2
R1918	192084	1B14214-10A	RES CMF 1/10W 5% 100K INLINE LEAD U1901/2
R1918	192070	1B14213-22A	RES CMF 1/10W 5% 22K OFFSET LEAD U1901/2
R1919	218508	XX70434-200	RES CMF 1/10W 5% 100R INLINE LEAD U1901/2
R1919	176818	93697-373	RES CMF 1/8W 5% 100R OFFSET LEAD U1901/2
R1920	179317	2819434-394	RES CF 1/4W 5% 750R
R1921	192097	1B14212-47A	RES CMF 1/10W 5% 4.7K

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R1922	175044	2819434-445	RES CF 1/4W 5% 100K
R1923	175044	2819434-445	RES CF 1/4W 5% 100K
R1924	192100	1B14212-10A	RES CMF 1/10W 5% 1K (SEE NOTE@)
R1924	218508	XX70434-200	RES CMF 1/10W 5% 100R (SEE NOTE@)
R1925	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1926	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1927	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1928	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1929	175042	2819434-405	RES CF 1/4W 5% 2.2K
R1930	192070	1B14213-22A	RES CMF 1/10W 5% 22K
R1932	192084	1B14214-10A	RES CMF 1/10W 5% 100K INLINE LEAD U1901/2
R1932	192070	1B14213-22A	RES CMF 1/10W 5% 22K OFFSET LEAD U1901/2
R1933	192084	1B14214-10A	RES CMF 1/10W 5% 100K INLINE LEAD U1901/2
R1933	174367	93697-429	RES CMF 1/8W 5% 22K OFFSET LEAD U1901/2
R1934	192835	93697-425	RES CMF 1/8W 5% 15K INLINE LEAD U1901/2
R1934	205336	XX60444-250	RES CMF 1/10W 2% 300R OFFSET LEAD U1901/2
R1935	192100	1B14212-10A	RES CMF 1/10W 5% 1K INLINE LEAD U1901/2
R1935	205354	XX70434-250	RES CMF 1/10W 5% 15K OFFSET LEAD U1901/2
R1936	195937	1B14213-10A	RES CMF 1/10W 5% 10K INLINE LEAD U1901/2
R1936	205336	XX60444-250	RES CMF 1/10W 2% 300R OFFSET LEAD U1901/2
R1937	195937	1B14213-10A	RES CMF 1/10W 5% 10K INLINE LEAD U1901/2
R1937	205354	XX70434-250	RES CMF 1/10W 5% 15K OFFSET LEAD U1901/2
R1938	175413	2819434-413	RES CF 1/4W 5% 4.7K
R1939	218508	XX70434-200	RES CMF 1/10W 5% 100R INLINE LEAD U1901/2
R1939	176818	93697-373	RES CMF 1/8W 5% 100R OFFSET LEAD U1901/2
R1940	195936	1B14214-43A	RES CMF 1/10W 5% 430K INLINE LEAD U1901/2 (SEE NOTE@)
R1940	205387	1B14214-82A	RES CMF 1/10W 5% 820K INLINE LEAD U1901/2 (SEE NOTE@)
R1940	174347	93697-390	RES CMF 1/8W 5% 510R OFFSET LEAD U1901/2
R1941	196073	1B08228-51A	RES WW 2W 5% .51R
R1942	207837	1B08328-18A	* RES WW 3W 5% .18R INLINE LEAD U1901/2
R1942	196073	1B08228-51A	* RES WW 2W 5% .51R OFFSET LEAD U1901/2
R1943	174350	93697-413	RES CMF 1/8W 5% 4.7K
R1944	176366	93697-405	RES CMF 1/8W 5% 2.2K
R1945	176366	93697-405	RES CMF 1/8W 5% 2.2K
R1946	192100	1B14212-10A	RES CMF 1/10W 5% 1K INLINE LEAD U1901/2
R1946	174348	93697-397	RES CMF 1/8W 5% 1K OFFSET LEAD U1901/2
R1947	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1950	192097	1B14202-47A	RES CMF 1/10W 2% 4.7K
R1951	195931	1B14204-15A	RES CMF 1/10W 2% 150K
R1952	192097	1B14202-47A	RES CMF 1/10W 2% 4.7K
R1953	195931	1B14204-15A	RES CMF 1/10W 2% 150K
R1956	174348	93697-397	RES CMF 1/8W 5% 1K
R1957	174348	93697-397	RES CMF 1/8W 5% 1K
R1970	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1974	205360	1B14213-33A	RES CMF 1/10W 5% 33K
R1975	174364	93697-421	RES CMF 1/8W 5% 10K
R1993	176818	93697-373	RES CMF 1/8W 5% 100R
R1994	218508	XX70434-200	RES CMF 1/10W 5% 100R
R1995	218508	XX70434-200	RES CMF 1/10W 5% 100R
R1996	176818	93697-373	RES CMF 1/8W 5% 100R
U1402	205919	1A51156-01A	IC QUAD OP AMP
U1410	161079	1421826-001	IC INPUT SEL SWITCH
U1411	149018	1421754-001	IC QUAD OP AMP
U1502	176226	1421837-001	IC TONE/VOL/BALANCE
U1600	190484	1A51102-01A	IC STEREO DBX DECODER
U1601	204290	1A51133-01A	IC DIG AUDIO CONTROL
U1602	207828	1A68122-01A	IC BUS EXPANDER
U1850	149018	1421754-001	IC QUAD OP AMP
U1851	205246	1A68111-01A	IC GE CONTROLLER
U1901	175722	1421838-001	IC POWER OUTPUT INLINE LEAD
U1901	216806	XX11090-690	IC POWER OUTPUT OFFSET LEAD
U1902	175722	1421838-001	IC POWER OUTPUT INLINE LEAD
U1902	216806	XX11090-690	IC POWER OUTPUT OFFSET LEAD
U1903	149018	1421754-001	IC QUAD OP AMP
U1907	204292	1A51126-01A	IC DUAL OP AMP
	206780	1449749-002	BRACKET, FPA SUPPORT
	216812	4R04007-01B	BRACKET, HOT SUPPORT
	215715	2844624-11B	* INSULATOR, AMPS

10W DIGITAL AUDIO CBA

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
		2F35023-525	● CIRCUIT COMPLETE CTC169BL,BM (USE 2F35023-575)
	206000	2F35023-575	● CIRCUIT COMPLETE CTC169BL,BM,BN,HM,HN
C1101	153991	1C30130-22A	CAP LYTC 22UF M 25V
C1110	189981	1C30150-10A	CAP LYTC 10UF M 50V
C1111	189981	1C30150-10A	CAP LYTC 10UF M 50V
C1112	189981	1C30150-10A	CAP LYTC 10UF M 50V
C1113	189981	1C30150-10A	CAP LYTC 10UF M 50V
C1436	220998	1C30179-10A	CAP LYTC 1UF M 100V
C1437	220998	1C30179-10A	CAP LYTC 1UF M 100V
C1438	220998	1C30179-10A	CAP LYTC 1UF M 100V
C1439	220998	1C30179-10A	CAP LYTC 1UF M 100V
C1440	189981	1C30150-10A	CAP LYTC 10UF M 50V
C1441	189981	1C30150-10A	CAP LYTC 10UF M 50V
C1601	220998	1C30179-10A	CAP LYTC 1UF M 100V
C1602	174412	2861143-64A	CAPCC 100PF J NPO 50V
C1603	220998	1C30179-10A	CAP LYTC 1UF M 100V
C1604	174412	2861143-64A	CAPCC 100PF J NPO 50V
C1605	220998	1C30179-10A	CAP LYTC 1UF M 100V
C1606	174412	2861143-64A	CAPCC 100PF J NPO 50V
C1607	220998	1C30179-10A	CAP LYTC 1UF M 100V
C1608	174412	2861143-64A	CAPCC 100PF J NPO 50V
C1609	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1610	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1611	176828	2861143-54A	CAPCC 82PF J NPO 50V
C1613	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C1614	189981	1C30150-10A	CAP LYTC 10UF M 50V
C1615	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C1616	174412	2861143-64A	CAPCC 100PF J NPO 50V
C1617	174412	2861143-64A	CAPCC 100PF J NPO 50V
C1618	174412	2861143-64A	CAPCC 100PF J NPO 50V
C1619	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C1620	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C1621	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C1622	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C1623	193042	1C30231-22A	CAP LYTC 220UF M 25V
C1624	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1626	194903	1C18500-22A	CAPCC 22PF K NPO 50V
C1627	181090	2861143-14A	CAPCC 39PF J NPO 50V
C1628	194581	1C30131-10A	CAP LYTC 100UF M 25V
C1629	174402	2861142-33A	CAPCC 10PF F NPO 50V
C1630	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1632	174412	2861143-64A	CAPCC 100PF J NPO 50V
C1633	197600	1C18572-10A	CAPCC 1000PF K X7R 50V
C1634	179277	2861147-25Z	CAPCC .047UF J X7R 50V
C1901	220998	1C30179-10A	CAP LYTC 1UF M 100V
C1902	220998	1C30179-10A	CAP LYTC 1UF M 100V
C1905	153991	1C30130-22A	CAP LYTC 22UF M 25V
C1918	201162	1C31132-10A	CAP LYTC 1000UF M 25V
C1919	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1920	143867	2841252-23A	CAPCD 47PF J NPO 50V
C1921	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1922	190499	1C30179-47A	CAP LYTC 4.7UF M 100V
C1923	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1924	181462	2861148-17S	CAPCC .22UF Z Y5V 50V

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
C1925	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1926	204871	2861143-25M	CAPCC 47PF K SL 50V
C1927	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1928	190499	1C30179-47A	CAP LYTC 4.7UF M 100V
C1929	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1930	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1931	201162	1C31132-10A	CAP LYTC 1000UF M 25V
C1932	190499	1C30179-47A	CAP LYTC 4.7UF M 100V
C1933	190499	1C30179-47A	CAP LYTC 4.7UF M 100V
C1934	176302	1C30111-10A	CAP LYTC 100UF M 10V
CR1110	164717	1471872-006	DIODE
CR1111	164717	1471872-006	DIODE
CR1901	147015	99203-203	DIODE
CR1902	147015	99203-203	DIODE
DNR			SEE DNR CIRCUIT (USED ON 2F35023-525)
FB1602	181469	2821741-001	BEAD
J1407	190513	1P21002-31A	JACK PHONO AUD IN 1L
J1408	190512	1P21002-21A	JACK PHONO AUD IN 1R
J1409	190513	1P21002-31A	JACK PHONO AUD IN 2L
J1410	190512	1P21002-21A	JACK PHONO AUD IN 2R
J1411/12	190516	1P21003-33A	JACK DUAL PHONO HIFI OUT L/SEL AUD OUT L
J1413/14	190515	1P21003-22A	JACK DUAL PHONO HIFI OUT R/SEL AUD OUT R
J1903	201161	XX60371-600	CONNECTOR 7 PIN POWER
J1904	250034	XX10817-600	CONNECTOR 4 PIN SPKRS
JC202	181161	93697-005	RES CMF 1/8W 5% .05R
JC203	181161	93697-005	RES CMF 1/8W 5% .05R
JC204	205408	1B14229-00A	RES CMF 1/10W 10% .00R
JC206	181161	93697-005	RES CMF 1/8W 5% .05R
JC207	205408	1B14229-00A	RES CMF 1/10W 10% .00R
JC208	181161	93697-005	RES CMF 1/8W 5% .05R
JC209	181161	93697-005	RES CMF 1/8W 5% .05R
JC210	205408	1B14229-00A	RES CMF 1/10W 10% .00R
JC211	181161	93697-005	RES CMF 1/8W 5% .05R
JC212	181161	93697-005	RES CMF 1/8W 5% .05R
L1601	197616	1C51109-22A	COIL 2.2UH
L1602	197616	1C51109-22A	COIL 2.2UH
L1603	197616	1C51109-22A	COIL 2.2UH
Q1101	146847	1417306-013	TRANSISTOR +5V REG
Q1102	215495	1417500-001	TRANSISTOR SWITCH
Q1103	215495	1417500-001	TRANSISTOR SWITCH
Q1110	215495	1417500-001	TRANSISTOR SWITCH
Q1111	215495	1417500-001	TRANSISTOR SWITCH
Q1112	215495	1417500-001	TRANSISTOR MUTE
Q1113	215495	1417500-001	TRANSISTOR MUTE
Q1114	215495	1417500-001	TRANSISTOR MUTE
Q1115	215495	1417500-001	TRANSISTOR MUTE
Q1413	215495	1417500-001	TRANSISTOR AUDIO AMP
Q1414	215495	1417500-001	TRANSISTOR AUDIO AMP
Q1415	215495	1417500-001	TRANSISTOR TOP OUTPUT
Q1416	215495	1417500-001	TRANSISTOR BOTTOM OUT
Q1417	215495	1417500-001	TRANSISTOR TOP OUTPUT
Q1418	215495	1417500-001	TRANSISTOR BOTTOM OUT
Q1601	215495	1417500-001	TRANSISTOR SWITCH
Q1901	146847	1417306-013	TRANSISTOR SPKR SW
Q1902	215496	1417501-001	TRANSISTOR SWITCH
Q1903	215495	1417500-001	TRANSISTOR +DC DETECT
Q1904	215496	1417501-001	TRANSISTOR -DC DETECT
Q1905	215495	1417500-001	TRANSISTOR +DC DETECT
Q1906	215496	1417501-001	TRANSISTOR -DC DETECT
Q1907	146847	1417306-013	TRANSISTOR SWITCH
R1101	179297	2819435-369 *	RES CF 1/2W 5% 68R
R1102	192096	1B14212-22A	RES CMF 1/10W 5% 2.2K
R1103	218508	1B14211-10A	RES CMF 1/10W 5% 100R
R1104	175042	2819434-405	RES CF 1/4W 5% 2.2K
R1120	829010	993272-349 *	RES CFFP 1/4W 5% 10R
R1121	179378	93697-437	RES CMF 1/8W 5% 47K
R1122	176816	93697-445	RES CMF 1/8W 5% 100K
R1123	179378	93697-437	RES CMF 1/8W 5% 47K
R1124	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1125	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1126	174364	93697-421	RES CMF 1/8W 5% 10K

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R1127	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1128	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1129	192093	1B14214-22A	RES CMF 1/10W 5% 220K
R1130	192093	1B14214-22A	RES CMF 1/10W 5% 220K
R1451	179963	2819434-453	RES CF 1/4W 5% 220K
R1453	179963	2819434-453	RES CF 1/4W 5% 220K
R1455	179963	2819434-453	RES CF 1/4W 5% 220K
R1457	179963	2819434-453	RES CF 1/4W 5% 220K
R1459	179963	2819434-453	RES CF 1/4W 5% 220K
R1461	179963	2819434-453	RES CF 1/4W 5% 220K
R1483	176634	2819434-417	RES CF 1/4W 5% 6.8K
R1484	176634	2819434-417	RES CF 1/4W 5% 6.8K
R1485	192087	1B14212-68A	RES CMF 1/10W 5% 6.8K
R1486	192087	1B14212-68A	RES CMF 1/10W 5% 6.8K
R1487	197633	1B14213-47A	RES CMF 1/10W 5% 47K
R1488	197633	1B14213-47A	RES CMF 1/10W 5% 47K
R1489	162001	93697-401	RES CMF 1/8W 5% 1.5K
R1490	162001	93697-401	RES CMF 1/8W 5% 1.5K
R1491	174364	93697-421	RES CMF 1/8W 5% 10K
R1492	174364	93697-421	RES CMF 1/8W 5% 10K
R1601	179963	2819434-453	RES CF 1/4W 5% 220K
R1602	179963	2819434-453	RES CF 1/4W 5% 220K
R1603	179963	2819434-453	RES CF 1/4W 5% 220K
R1604	179963	2819434-453	RES CF 1/4W 5% 220K
R1605	178281	93697-417	RES CMF 1/8W 5% 6.8K
R1606	178299	93697-415	RES CMF 1/8W 5% 5.6K
R1607	174344	93697-383	RES CMF 1/8W 5% 270R
R1608	178283	93697-462	RES CMF 1/8W 5% 510K
R1609	174367	93697-429	RES CMF 1/8W 5% 22K
R1610	175055	2819434-397	RES CF 1/4W 5% 1K
R1611	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1612	195942	1B14211-47A	RES CMF 1/10W 5% 470R
R1613	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1614	181080	93697-409	RES CMF 1/8W 5% 3.3K
R1615	181080	93697-409	RES CMF 1/8W 5% 3.3K
R1616	176366	93697-405	RES CMF 1/8W 5% 2.2K
R1617	176366	93697-405	RES CMF 1/8W 5% 2.2K
R1618	179378	93697-437	RES CMF 1/8W 5% 47K
R1623	191819	93697-456	RES CMF 1/8W 5% 300K
R1624	174344	93697-383	RES CMF 1/8W 5% 270R
R1625	174364	93697-421	RES CMF 1/8W 5% 10K
R1626	176813	93697-433	RES CMF 1/8W 5% 33K
R1627	181080	93697-409	RES CMF 1/8W 5% 3.3K
R1901	175044	2819434-445	RES CF 1/4W 5% 100K
R1905	175055	2819434-397	RES CF 1/4W 5% 1K
R1908	175317	2819434-421	RES CF 1/4W 5% 10K
R1909	175055	2819434-397	RES CF 1/4W 5% 1K
R1910	175055	2819434-397	RES CF 1/4W 5% 1K
R1911	200186	2819434-349	RES CF 1/4W 5% 10R
R1912	175044	2819434-445	RES CF 1/4W 5% 100K
R1913	176876	2819434-406	RES CF 1/4W 5% 2.4K
R1914	175044	2819434-445	RES CF 1/4W 5% 100K
R1915	200186	2819434-349	RES CF 1/4W 5% 10R
R1916	175044	2819434-445	RES CF 1/4W 5% 100K
R1917	176876	2819434-406	RES CF 1/4W 5% 2.4K
R1918	176816	93697-445	RES CMF 1/8W 5% 100K
R1919	175055	2819434-397	RES CF 1/4W 5% 1K
R1920	174364	93697-421	RES CMF 1/8W 5% 10K
R1921	174364	93697-421	RES CMF 1/8W 5% 10K
R1922	179378	93697-437	RES CMF 1/8W 5% 47K
R1923	176816	93697-445	RES CMF 1/8W 5% 100K
R1924	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1925	179378	93697-437	RES CMF 1/8W 5% 47K
R1926	192093	1B14214-22A	RES CMF 1/10W 5% 220K
R1927	192093	1B14214-22A	RES CMF 1/10W 5% 220K
R1928	179963	2819434-453	RES CF 1/4W 5% 220K
R1929	175312	2819434-393	RES CF 1/4W 5% 680R
R1930	197637	1B14211-68A	RES CMF 1/10W 5% 680R
R1931	192093	1B14214-22A	RES CMF 1/10W 5% 220K
R1932	175044	2819434-445	RES CF 1/4W 5% 100K
R1933	176816	93697-445	RES CMF 1/8W 5% 100K
R1934	179378	93697-437	RES CMF 1/8W 5% 47K
R1937	179378	93697-437	RES CMF 1/8W 5% 47K
TVB			SEE AUDIO TVB CBA (USED ON 2F35023-575)
U1600	250032	1A68106-01A	IC STEREO PROCESSOR
U1901	175722	1421838-001	IC AUDIO OUT
U1902	175722	1421838-001	IC AUDIO OUT
Y1601	250036	2816766-08A	CRYSTAL 11.01386MHZ

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	216812	4R04007-01B	BRACKET, SUPPORT
	205208	2G36012-566	CABLE, DNR
	154382	1449749-017	SUPPORT,DNR

5W ANALOG AUDIO CBA

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
		2F35044-511	● CIRCUIT COMPLETE CTC169PV,PX (USE 2F35046-511)
	219413	2F35046-511	● CIRCUIT COMPLETE CTC169PB,PF,PK, PM,PV,PX
	219415	2F35046-514	● CIRCUIT COMPLETE CTC169PC,PG
C1406	220998	1C30179-10A	CAP LYTC 1UF M 100V
C1407	220998	1C30179-10A	CAP LYTC 1UF M 100V
C1408	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1409	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1411	207849	XX50291-900	CAP LYTC 22UF M 16V
C1412	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C1413	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C1414	216804	XX11007-472	CAP LYTC 1UF M 50V
C1415	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1416	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1450	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C1451	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C1452	220998	1C30179-10A	CAP LYTC 1UF M 100V
C1453	220998	1C30179-10A	CAP LYTC 1UF M 100V
C1454	197600	1C18572-10A	CAPCC 1000PF K X7R 50V
C1455	208429	XX43392-660	CAP LYTC 47UF M 16V
C1456	208429	XX43392-660	CAP LYTC 47UF M 16V
C1470	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1471	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1500	216804	XX11007-472	CAP LYTC 1UF M 50V
C1501	216804	XX11007-472	CAP LYTC 1UF M 50V
C1502	216802	XX20438-725	CAP LYTC 10UF M 16V
C1503	205230	1C18572-47A	CAPCC 4700PF K X7R 50V
C1504	207852	2821736-37S	CAPCC .12UF Z Y5V 50V
C1506	190548	2861145-85Z	CAPCC 4700PF K X7R 50V
C1507	207852	2821736-37S	CAPCC .12UF Z Y5V 50V
C1508	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C1509	153991	1C30130-22A	CAP LYTC 22UF M 25V
C1510	153991	1C30130-22A	CAP LYTC 22UF M 25V
C1511	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1512	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1513	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1514	216802	XX20438-725	CAP LYTC 10UF M 16V
C1520	200148	1C18672-47A	CAPCC 4700PF M X7R 50V
C1521	179277	2861147-25Z	CAPCC .047UF J X7R 50V
C1522	200148	1C18672-47A	CAPCC 4700PF M X7R 50V
C1525	220998	1C30179-10A	CAP LYTC 1UF M 100V
C1526	220998	1C30179-10A	CAP LYTC 1UF M 100V
C1600	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C1601	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1602	207853	2861147-87S	CAPCC .15UF Z Y5V 50V
C1603	197600	1C18572-10A	CAPCC 1000PF K X7R 50V
C1604	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C1605	160077	1C30178-47A	CAP LYTC .47UF M 100V
C1607	153991	1C30130-22A	CAP LYTC 22UF M 25V
C1608	153991	1C30130-22A	CAP LYTC 22UF M 25V
C1609	160077	1C30178-47A	CAP LYTC .47UF M 100V
C1610	207854	XX11011-307	CAP LYTC .47UF M 50V
C1611	160077	1C30178-47A	CAP LYTC .47UF M 100V
C1612	189981	1C30150-10A	CAP LYTC 10UF M 50V
C1613	151119	1C30179-33A	CAP LYTC 3.3UF M 100V
C1614	153991	1C30130-22A	CAP LYTC 22UF M 25V
C1615	153991	1C30130-22A	CAP LYTC 22UF M 25V
C1616	190527	2821725-361	CAP LYTC 2.2UF M 50V
C1617	190528	2821725-461	CAP LYTC 3.3UF M 50V
C1618	190529	2821725-561	CAP LYTC 4.7UF M 50V
C1619	194581	1C30131-10A	CAP LYTC 100UF M 25V
C1620	153991	1C30130-22A	CAP LYTC 22UF M 25V
C1621	220998	1C30179-10A	CAP LYTC 1UF M 100V
C1622	190551	2861146-75Z	CAPCC .022UF K X7R 50V
C1623	189981	1C30150-10A	CAP LYTC 10UF M 50V
C1624	190551	2861146-75Z	CAPCC .022UF K X7R 50V
C1625	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1627	176302	1C30111-10A	CAP LYTC 100UF M 10V
C1628	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1905	191959	1C30130-47A	CAP LYTC 47UF M 25V (SEE NOTE@)
C1905	194581	1C30131-10A	CAP LYTC 100UF M 25V (SEE NOTE@)
C1906	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C1909	191959	1C30130-47A	CAP LYTC 47UF M 25V
C1910	191959	1C30130-47A	CAP LYTC 47UF M 25V
C1912	200141	2821714-224	CAP POLY .1UF K 63V
C1913	200141	2821714-224	CAP POLY .1UF K 63V
C1916	190492	1C30132-15A	CAP LYTC 1500UF K 25V
C1917	190492	1C30132-15A	CAP LYTC 1500UF K 25V
C1918	250114	1C31141-68A	CAP LYTC 680UF M 35V
C1919	197600	1C18572-10A	CAPCC 1000PF K X7R 50V
C1920	176302	1C30111-10A	CAP LYTC 100UF M 10V
C1921	176302	1C30111-10A	CAP LYTC 100UF M 10V
CR1501	164717	1471872-006	DIODE
CR1502	164717	1471872-006	DIODE
CR1901	147015	99203-203	DIODE
CR1902	147015	99203-203	DIODE
CR1903	164717	1471872-006	DIODE
CR1904	164717	1471872-006	DIODE
CR1905	161081	99201-310	DIODE ZENER 5.6V .4W
J1407	190513	1P21002-31A	JACK PHONO AUD OUT 1L
J1408	190512	1P21002-21A	JACK PHONO AUD OUT 1R
J1409	190513	1P21002-31A	JACK PHONO AUD OUT 2L
J1410	190512	1P21002-21A	JACK PHONO AUD OUT 2R
J1411/12	190516	1P21003-33A	JACK DUAL PHONO HI-FI OUT L/SEL AUD OUT L
J1413/14	190515	1P21003-22A	JACK DUAL PHONO HI-FI OUT R/SEL AUD OUT R
J1416	207843	XX60306-800	CONNECTOR 3 PIN HEADPH
J1904	250034	XX10004-960	CONNECTOR 4 PIN SPKRS
J1905	250033	XX10005-070	* CONNECTOR 5 PIN POWER
JC200	181161	93697-005	RES CMF 1/8W 5% .05R
JC201	181161	93697-005	RES CMF 1/8W 5% .05R
JC202	192065	1B14229-00A	RES CMF 1/10W 10% .0R
JC203	181161	93697-005	RES CMF 1/8W 5% .05R
JC204	181161	93697-005	RES CMF 1/8W 5% .05R
JC205	181161	93697-005	RES CMF 1/8W 5% .05R
JC207	181161	93697-005	RES CMF 1/8W 5% .05R
JC208	181161	93697-005	RES CMF 1/8W 5% .05R
JC210	181161	93697-005	RES CMF 1/8W 5% .05R
JC211	192065	1B14229-00A	RES CMF 1/10W 10% .0R
JC212	192065	1B14229-00A	RES CMF 1/10W 10% .0R
Q1400	179740	1417500-001	TRANSISTOR +12V SWITCH
Q1401	179740	1417500-001	TRANSISTOR -12V SWITCH
Q1402	179740	1417500-001	TRANSISTOR TOP OUTPUT
Q1403	179741	1417501-001	TRANSISTOR BOT OUTPUT
Q1404	179740	1417500-001	TRANSISTOR TOP OUTPUT
Q1405	179741	1417501-001	TRANSISTOR BOT OUTPUT
Q1406	179741	1417501-001	TRANSISTOR BUFFER
Q1407	179741	1417501-001	TRANSISTOR BUFFER
Q1408	179741	1417501-001	TRANSISTOR SLOW START
Q1409	179740	1417500-001	TRANSISTOR SLOW START
Q1410	179741	1417501-001	TRANSISTOR SLOW START
Q1500	179741	1417501-001	TRANSISTOR EXP 12V SW
Q1503	179740	1417500-001	TRANSISTOR EXP SWITCH
Q1507	179741	1417501-001	TRANSISTOR L FOLLOWER
Q1550	179740	1417500-001	TRANSISTOR BUFFER
Q1551	192849	1417411-007	TRANSISTOR EXPANDER
Q1552	179740	1417500-001	TRANSISTOR BUFFER
Q1601	179740	1417500-001	TRANSISTOR MUTE
Q1901	179740	1417500-001	TRANSISTOR MUTE
Q1902	179740	1417500-001	TRANSISTOR LIMITER
Q1903	179740	1417500-001	TRANSISTOR LIMITER
Q1904	179740	1417500-001	TRANSISTOR REGULATOR
R1407	197633	1B14213-47A	RES CMF 1/10W 5% 47K
R1408	197633	1B14213-47A	RES CMF 1/10W 5% 47K
R1409	176645	2819434-377	RES CF 1/4W 5% 150R
R1410	176645	2819434-377	RES CF 1/4W 5% 150R
R1411	174350	93697-413	RES CMF 1/8W 5% 4.7K
R1412	192097	1B14212-47A	RES CMF 1/10W 5% 4.7K
R1413	176366	93697-405	RES CMF 1/8W 5% 2.2K
R1414	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1416	197639	1B14212-36A	RES CMF 1/10W 5% 3.6K

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R1419	175055	2819434-397	RES CF 1/4W 5% 1K
R1420	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1421	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1422	192070	1B14213-22A	RES CMF 1/10W 5% 22K
R1423	194927	1B14211-10A	RES CMF 1/10W 5% 100R
R1424	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1425	201143	1B14212-62A	RES CMF 1/10W 5% 6.2K
R1426	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1427	201143	1B14212-62A	RES CMF 1/10W 5% 6.2K
R1429	176632	727832-167 *	RES CC 1/2W 5% 2.2K
R1431	176632	727832-167 *	RES CC 1/2W 5% 2.2K
R1433	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1434	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1435	176796	2819435-373	RES CF 1/2W 5% 100R
R1436	192096	1B14212-22A	RES CMF 1/10W 5% 2.2K
R1442	175755	2819434-363	RES CF 1/4W 5% 39R
R1443	175755	2819434-363	RES CF 1/4W 5% 39R
R1444	192096	1B14212-22A	RES CMF 1/10W 5% 2.2K
R1446	176796	2819435-373	RES CF 1/2W 5% 100R
R1447	194927	1B14211-10A	RES CMF 1/10W 5% 100R
R1448	194927	1B14211-10A	RES CMF 1/10W 5% 100R
R1451	181490	93697-453	RES CMF 1/8W 5% 220K
R1452	108865	727832-159 *	RES CC 1/4W 5% 1K
R1453	181490	93697-453	RES CMF 1/8W 5% 220K
R1454	108865	727832-159 *	RES CC 1/4W 5% 1K
R1455	181490	93697-453	RES CMF 1/8W 5% 220K
R1456	108865	727832-159 *	RES CC 1/4W 5% 1K
R1457	181490	93697-453	RES CMF 1/8W 5% 220K
R1458	108865	727832-159 *	RES CC 1/4W 5% 1K
R1459	175317	2819434-421	RES CF 1/4W 5% 10K
R1460	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1461	197633	1B14213-47A	RES CMF 1/10W 5% 47K
R1462	197633	1B14213-47A	RES CMF 1/10W 5% 47K
R1463	829047	993272-365 *	RES CFFP 1/4W 5% 47R
R1464	829047	993272-365 *	RES CFFP 1/4W 5% 47R
R1465	829047	993272-365 *	RES CFFP 1/4W 5% 47R
R1470	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1471	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1479	175317	2819434-421	RES CF 1/4W 5% 10K
R1480	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1481	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1482	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1483	176645	2819434-377	RES CF 1/4W 5% 150R
R1484	176645	2819434-377	RES CF 1/4W 5% 150R
R1488	176632	727832-167 *	RES CC 1/2W 5% 2.2K
R1490	175317	2819434-421	RES CF 1/4W 5% 10K
R1491	175317	2819434-421	RES CF 1/4W 5% 10K
R1493	175413	2819434-413	RES CF 1/4W 5% 4.7K
R1494	176632	727832-167 *	RES CC 1/2W 5% 2.2K
R1495	181490	93697-453	RES CMF 1/8W 5% 220K
R1496	181490	93697-453	RES CMF 1/8W 5% 220K
R1501	197633	1B14213-47A	RES CMF 1/10W 5% 47K
R1502	197633	1B14213-47A	RES CMF 1/10W 5% 47K
R1503	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1504	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1505	175055	2819434-397	RES CF 1/4W 5% 1K
R1506	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1507	174364	93697-421	RES CMF 1/8W 5% 10K
R1508	192835	93697-425	RES CMF 1/8W 5% 15K
R1509	174365	93697-423	RES CMF 1/8W 5% 12K
R1510	192835	93697-425	RES CMF 1/8W 5% 15K
R1511	175325	2819434-373	RES CF 1/4W 5% 100R
R1514	194927	1B14211-10A	RES CMF 1/10W 5% 100R
R1515	194927	1B14211-10A	RES CMF 1/10W 5% 100R
R1519	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1520	174364	93697-421	RES CMF 1/8W 5% 10K
R1521	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1522	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1523	197470	1B14213-20A	RES CMF 1/10W 5% 20K
R1524	174364	93697-193	RES CMF 1/8W 10% 10M
R1525	192835	93697-425	RES CMF 1/8W 5% 15K
R1526	197470	1B14213-20A	RES CMF 1/10W 5% 20K
R1544	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1563	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1564	174348	93697-397	RES CMF 1/8W 5% 1K (.12x.06)(SEE NOTE@) CTC169PV,PX
R1564	192100	1B14212-10A	RES CMF 1/10W 5% 1K (.08x.05)(SEE NOTE@) CTC169PB,PC,PF,PG, PK,PM,PV,PX
R1577	162005	93697-442	RES CMF 1/8W 5% 75K
R1578	179378	93697-437	RES CMF 1/8W 5% 47K
R1579	179378	93697-437	RES CMF 1/8W 5% 47K
R1582	177816	2819434-459	RES CF 1/4W 5% 390K
R1583	176645	2819434-377	RES CF 1/4W 5% 150R
R1584	174348	93697-397	RES CMF 1/8W 5% 1K
R1601	200186	2819434-349	RES CF 1/4W 5% 10R
R1602	197903	1B14212-18A	RES CMF 1/10W 5% 1.8K
R1603	174365	93697-423	RES CMF 1/8W 5% 12K
R1604	191389	2821716-203	RES CONTROL STEREO/SAP FILTER
R1605	162005	93697-442	RES CMF 1/8W 5% 75K
R1606	190526	2821716-503	RES CONTROL BASEBAND FILTER
R1607	207835	1B14214-18A	RES CMF 1/10W 5% 180K
R1608	193061	93697-431	RES CMF 1/8W 5% 27K
R1609	181108	2821716-104	RES CONTROL WB NULL
R1610	191136	93697-444	RES CMF 1/8W 5% 91K
R1611	195951	2821716-254	RES CONTROL HB NULL
R1613	193061	93697-431	RES CMF 1/8W 5% 27K
R1615	181494	93697-443	RES CMF 1/8W 5% 82K (SEE NOTE@)
R1615	191136	XX30943-040	RES CMF 1/8W 5% 91K (SEE NOTE@)
R1616	190526	2821716-503	RES CONTROL VCO (GREEN KNOB) (SEE NOTE@)
R1616	177366	XX11066-900	RES CONTROL VCO (ORANGE KNOB) (SEE NOTE@)
R1617	174348	93697-397	RES CMF 1/8W 5% 1K
R1618	176645	2819434-377	RES CF 1/4W 5% 150R
R1620	176645	2819434-377	RES CF 1/4W 5% 150R
R1621	176645	2819434-377	RES CF 1/4W 5% 150R
R1622	175055	2819434-397	RES CF 1/4W 5% 1K
R1623	175055	2819434-397	RES CF 1/4W 5% 1K
R1624	162006	93697-411	RES CMF 1/8W 5% 3.9K
R1625	180325	93697-428	RES CMF 1/8W 5% 20K
R1630	176816	93697-445	RES CMF 1/8W 5% 100K
R1631	176816	93697-445	RES CMF 1/8W 5% 100K
R1632	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1633	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1636	175357	2819434-357	RES CF 1/4W 5% 22R
R1640	205354	1B14213-15A	RES CMF 1/10W 5% 15K
R1641	205354	1B14213-15A	RES CMF 1/10W 5% 15K
R1642	205354	1B14213-15A	RES CMF 1/10W 5% 15K
R1643	192835	93697-425	RES CMF 1/8W 5% 15K
R1644	192835	93697-425	RES CMF 1/8W 5% 15K
R1645	174364	93697-421	RES CMF 1/8W 5% 10K
R1646	174364	93697-421	RES CMF 1/8W 5% 10K
R1647	174364	93697-421	RES CMF 1/8W 5% 10K
R1648	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1649	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R1650	176645	2819434-377	RES CF 1/4W 5% 150R
R1655	175772	2821523-337 *	RES MFFP 1/2W 5% 3.3R
R1656	829010	993272-349 *	RES CFFP 1/4W 5% 10R
R1690	174348	93697-397	RES CMF 1/8W 5% 1K
R1691	174348	93697-397	RES CMF 1/8W 5% 1K
R1692	174348	93697-397	RES CMF 1/8W 5% 1K
R1693	176816	93697-445	RES CMF 1/8W 5% 100K
R1694	175055	2819434-397	RES CF 1/4W 5% 1K
R1701	175325	2819434-373	RES CF 1/4W 5% 100R
R1702	175325	2819434-373	RES CF 1/4W 5% 100R
R1703	175325	2819434-373	RES CF 1/4W 5% 100R
R1704	175325	2819434-373	RES CF 1/4W 5% 100R
R1705	194927	1B14211-10A	RES CMF 1/10W 5% 100R
R1706	194927	1B14211-10A	RES CMF 1/10W 5% 100R
R1707	194927	1B14211-10A	RES CMF 1/10W 5% 100R
R1708	194927	1B14211-10A	RES CMF 1/10W 5% 100R
R1901	179955	2819434-435	RES CF 1/4W 5% 39K
R1902	174364	93697-421	RES CMF 1/8W 5% 10K
R1903	175311	2819434-402	RES CF 1/4W 5% 1.6K
R1904	175755	2819434-363	RES CF 1/4W 5% 39R (SEE NOTE@)
R1904	175766	2819434-371	RES CF 1/4W 2% 82R (SEE NOTE@)
R1904	175318	2819434-367	RES CF 1/4W 5% 56R (SEE NOTE@)
R1905	175055	2819434-397	RES CF 1/4W 5% 1K
R1906	147960	993272-341 *	RES CFFP 1/4W 5% 4.7R
R1907	147960	993272-341 *	RES CFFP 1/4W 5% 4.7R
R1908	174364	93697-421	RES CMF 1/8W 5% 10K
R1909	174348	93697-397	RES CMF 1/8W 5% 1K

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R1910	174348	93697-397	RES CMF 1/8W 5% 1K
R1935	175755	2819434-363	RES CF 1/4W 5% 39R (SEE NOTE@)
R1935	175766	2819434-371	RES CF 1/4W 2% 82R (SEE NOTE@)
R1935	175318	2819434-367	RES CF 1/4W 5% 56R (SEE NOTE@)
R1936	175311	2819434-402	RES CF 1/4W 5% 1.6K
R1940	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1941	195937	1B14203-10A	RES CMF 1/10W 2% 10K
R1942	175055	2819434-397	RES CF 1/4W 5% 1K
R1943	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1944	195937	1B14203-10A	RES CMF 1/10W 2% 10K
R1945	176632	2819435-405	RES CF 1/2W 5% 2.2K
R1946	195937	1B14203-10A	RES CMF 1/10W 2% 10K
R1947	205352	1B14203-12A	RES CMF 1/10W 2% 12K
R1948	205342	1B14202-24A	RES CMF 1/10W 2% 2.4K
R1949	174348	93697-397	RES CMF 1/8W 5% 1K
R1950	174348	93697-397	RES CMF 1/8W 5% 1K
U1402	207827	1A51167-01A	IC QUAD OP AMP
U1410	161079	1421826-001	IC INPUT SELECT SWITCH
U1411	204292	1A51126-01A	IC DUAL OP AMP
U1501	176226	1421837-001	IC TONE/VOLUME/BALANCE
U1600	190484	1A51102-01A	IC STEREO DBX DECODER
U1601	204290	1A51133-01A	IC DIG AUDIO CONTROL
U1602	207828	1A68122-01A	IC BUS EXPANDER
U1900	210911	1A51171-02A	IC DUAL POWER OUTPUT
	205202	4R04008-01B	BRACKET, SUPPORT

AUDIO CROSSOVER CBA

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
			(SEE INSTRUMENT ASY)
	205524	2F26003-501	CIRCUIT COMPLETE
	214724	2F26003-508	CIRCUIT COMPLETE
C7303	175120	1C30179-68A	CAP LYTC 6.8UF M 100V (501)
C7303	189992	1C30179-47A	CAP LYTC 4.7UF M 100V (508)
C7304	175120	1C30179-68A	CAP LYTC 6.8UF M 100V (501)
C7304	189992	1C30179-47A	CAP LYTC 4.7UF M 100V (508)
C7307	189992	1C30179-47A	CAP LYTC 4.7UF M 100V (501)
J7301	205224	XX10817-100	CONNECTOR 2 PIN
L7301	207096	1C64001-02A	COIL .6MH
R7304	832A33	2874125-337	RES MF 2W 5% 3.3R (501)
R7304	832A10	2874125-325	RES MF 2W 5% 1R (508)
R7305	179284	2874125-349	RES MFFP 2W 5% 10R (501)

AUDIO CROSSOVER CBA

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
			(SEE INSTRUMENT ASY)
CRSOVR	227514	2F26019-502	CIRCUIT COMPLETE
C7301	214015	XX40432-930	CAP POLY 1UF J 63V
C7302	227515	XX20467-240	CAP LYTC 68UF M 63V
C7303	227515	XX20467-240	CAP LYTC 68UF M 63V
C7306	189992	XX40433-160	CAP LYTC 4.7UF M 100V
C7307	189992	XX40433-160	CAP LYTC 4.7UF M 100V
C7321	214015	XX40432-930	CAP POLY 1UF J 63V
C7322	227515	XX20467-240	CAP LYTC 68UF M 63V
C7323	227515	XX20467-240	CAP LYTC 68UF M 63V
C7326	189992	XX40433-160	CAP LYTC 4.7UF M 100V
C7327	189992	XX40433-160	CAP LYTC 4.7UF M 100V
L7301	214629	1C64002-01A	TRANSFORMER
L7321	214629	1C64002-01A	TRANSFORMER

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
J7302	215542	XX60430-775	CONNECTOR 4 PIN
J7303	220343	XX90581-950	CONNECTOR 8 PIN

AUDIO DNR CBA

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	204481	2F26007-501 ●	CIRCUIT COMPLETE CTC169BL.BM
C1125	146451	1C30131-10A	CAP LYTC 100UF M 25V
C1126	161440	1C31111-47A	CAP LYTC 470UF M 10V
C1127	189991	1C30179-10A	CAP LYTC 1UF M 100V
C1128	189991	1C30179-10A	CAP LYTC 1UF M 100V
C1129	195691	1C30179-22A	CAP LYTC 2.2UF M 100V
C1130	179277	2861147-25Z	CAPCC .047UF J X7R 50V
C1131	181085	2861145-65Z	CAPCC 3300PF K X7R 50V
C1132	181085	2861145-65Z	CAPCC 3300PF K X7R 50V
C1133	161440	1C31111-47A	CAP LYTC 470UF M 10V
C1134	189991	1C30179-10A	CAP LYTC 1UF M 100V
C1135	189991	1C30179-10A	CAP LYTC 1UF M 100V
C1136	195691	1C30179-22A	CAP LYTC 2.2UF M 100V
C1137	179277	2861147-25Z	CAPCC .047UF J X7R 50V
C1138	181085	2861145-65Z	CAPCC 3300PF K X7R 50V
C1139	181085	2861145-65Z	CAPCC 3300PF K X7R 50V
C1140	189981	1C30150-10A	CAP LYTC 10UF M 50V
C1141	189981	1C30150-10A	CAP LYTC 10UF M 50V
C1142	190548	2861145-85Z	CAPCC 4700PF K X7R 50V
C1143	190548	2861145-85Z	CAPCC 4700PF K X7R 50V
C1144	197605	2861144-94M	CAPCC 1000PF J SL 50V
C1145	197605	2861144-94M	CAPCC 1000PF J SL 50V
C1146	197605	2861144-94M	CAPCC 1000PF J SL 50V
C1147	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C1148	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1149	250035	2861146-35Z	CAPCC .01UF K X7R 50V
C1150	197605	2861144-94M	CAPCC 1000PF J 50V
J1125	204482	XX80312-200	CONNECTOR 9 PIN AUDIO
JC200	181161	93697-005	RES CMF 1/8W 5% .05R
JC201	181161	93697-005	RES CMF 1/8W 5% .05R
JC203	181161	93697-005	RES CMF 1/8W 5% .05R
JC204	181161	93697-005	RES CMF 1/8W 5% .05R
JC205	181161	93697-005	RES CMF 1/8W 5% .05R
JC206	181161	93697-005	RES CMF 1/8W 5% .05R
Q1125	179740	1417500-001	TRANSISTOR BUFFER
Q1126	179740	1417500-001	TRANSISTOR BUFFER
Q1127	179740	1417500-001	TRANSISTOR SWITCH
Q1128	179740	1417500-001	TRANSISTOR SWITCH
Q1129	179741	1417501-001	TRANSISTOR BUFFER
Q1130	179740	1417500-001	TRANSISTOR BUFFER
R1125	829022	993272-357 *	RES CFFP 1/4W 5% 22R
R1126	174348	93697-397	RES CMF 1/8W 5% 1K
R1127	176366	93697-405	RES CMF 1/8W 5% 2.2K
R1129	174364	93697-421	RES CMF 1/8W 5% 10K
R1130	174364	93697-421	RES CMF 1/8W 5% 10K
R1131	174364	93697-421	RES CMF 1/8W 5% 10K
R1132	175418	93697-414	RES CMF 1/8W 5% 5.1K
R1134	174364	93697-421	RES CMF 1/8W 5% 10K
R1135	174364	93697-421	RES CMF 1/8W 5% 10K
R1136	175418	93697-414	RES CMF 1/8W 5% 5.1K
R1137	176368	93697-394	RES CMF 1/8W 5% 750R
R1138	174348	93697-397	RES CMF 1/8W 5% 1K
R1139	176366	93697-405	RES CMF 1/8W 5% 2.2K
R1140	175418	93697-414	RES CMF 1/8W 5% 5.1K
R1141	175417	2819434-414	RES CF 1/4W 5% 5.1K
R1142	176816	93697-445	RES CMF 1/8W 5% 100K
R1143	176816	93697-445	RES CMF 1/8W 5% 100K
R1144	176366	93697-405	RES CMF 1/8W 5% 2.2K
R1145	176368	93697-394	RES CMF 1/8W 5% 750R
R1146	175418	93697-414	RES CMF 1/8W 5% 5.1K
R1147	174348	93697-397	RES CMF 1/8W 5% 1K
R1148	174348	93697-397	RES CMF 1/8W 5% 1K
R1149	174364	93697-421	RES CMF 1/8W 5% 10K
R1150	174364	93697-421	RES CMF 1/8W 5% 10K
R1151	174364	93697-421	RES CMF 1/8W 5% 10K
R1152	174364	93697-421	RES CMF 1/8W 5% 10K
R1153	174364	93697-421	RES CMF 1/8W 5% 10K
R1154	174350	93697-437	RES CMF 1/8W 5% 47K

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R1155	174350	93697-437	RES CMF 1/8W 5% 47K
R1156	176366	93697-405	RES CMF 1/8W 5% 2.2K
R1157	174365	93697-423	RES CMF 1/8W 5% 12K
R1158	181061	93697-430	RES CMF 1/8W 5% 24K
R1159	174364	93697-421	RES CMF 1/8W 5% 10K
R1160	174364	93697-421	RES CMF 1/8W 5% 10K
R1161	174364	93697-421	RES CMF 1/8W 5% 10K
R1162	175418	93697-414	RES CMF 1/8W 5% 5.1K
R1163	176368	93697-394	RES CMF 1/8W 5% 750R
R1164	176366	93697-405	RES CMF 1/8W 5% 2.2K
U1125	161078	1421821-001	IC NOISE REDUCTION
U1126	161078	1421821-001	IC NOISE REDUCTION
U1127	149018	1421754-001	IC OP AMP

AUDIO TVB CBA

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	206750	2F26013-501	● CIRCUIT COMPLETE CTC169BL,BM,BN,HM,HN
C1125	200148	1C18672-47A	CAPCC 4700PF M X7R 50V
C1126	189991	1C30179-10A	CAP LYTC 1UF M 100V
C1127	189991	1C30179-10A	CAP LYTC 1UF M 100V
C1128	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1129	200148	1C18672-47A	CAPCC 4700PF M X7R 50V
C1130	189991	1C30179-10A	CAP LYTC 1UF M 100V
C1131	189991	1C30179-10A	CAP LYTC 1UF M 100V
C1132	189981	1C30150-10A	CAP LYTC 10UF M 50V
C1133	179277	2861147-25Z	CAPCC .047UF J X7R 50V
C1134	190548	2861145-85Z	CAPCC 4700PF K X7R 50V
C1135	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C1136	190548	2861145-85Z	CAPCC 4700PF K X7R 50V
C1137	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C1138	189981	1C30150-10A	CAP LYTC 10UF M 50V
C1139	250035	2861146-35Z	CAPCC .01UF K X7R 50V
C1140	146451	1C30131-10A	CAP LYTC 100UF M 25V
C1141	189991	1C30179-10A	CAP LYTC 1UF M 100V
C1142	250035	2861146-35Z	CAPCC .01UF K X7R 50V
C1143	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1144	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1145	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1146	146451	1C30131-10A	CAP LYTC 100UF M 25V
CR1127	206730	99201-009	DIODE ZENER 5.1V .4W
J1125	204482	XX80312-200	CONNECTOR 9 PIN AUDIO
JC101	192065	1B14229-00A	RES CMF 1/10W 10% .05R
JC102	181161	93697-005	RES CMF 1/8W 5% .05R
JC103	181161	93697-005	RES CMF 1/8W 5% .05R
JC104	181161	93697-005	RES CMF 1/8W 5% .05R
JC105	192065	1B14229-00A	RES CMF 1/10W 10% .05R
Q1126	192849	1417411-007	TRANSISTOR EXP ST SW
R1123	175307	2819434-390	RES CF 1/4W 5% 510R
R1124	175307	2819434-390	RES CF 1/4W 5% 510R
R1125	197470	1B14213-20A	RES CMF 1/10W 5% 20K
R1126	174348	93697-397	RES CMF 1/8W 5% 1K
R1127	175325	2819434-373	RES CF 1/4W 5% 100R
R1128	175322	2819434-437	RES CF 1/4W 5% 47K
R1129	175325	2819434-373	RES CF 1/4W 5% 100R
R1130	175325	2819434-373	RES CF 1/4W 5% 100R
R1131	197470	1B14213-20A	RES CMF 1/10W 5% 20K
R1132	174348	93697-397	RES CMF 1/8W 5% 1K
R1133	175322	2819434-437	RES CF 1/4W 5% 47K
R1134	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1135	197633	1B14213-47A	RES CMF 1/10W 5% 47K
R1136	174348	93697-397	RES CMF 1/8W 5% 1K
R1137	174350	93697-437	RES CMF 1/8W 5% 47K
R1138	197470	1B14213-20A	RES CMF 1/10W 5% 20K
R1139	192082	1B14212-15A	RES CMF 1/10W 5% 1.5K
R1140	162001	93697-401	RES CMF 1/8W 5% 1.5K
R1141	174364	93697-421	RES CMF 1/8W 5% 10K
R1142	174364	93697-421	RES CMF 1/8W 5% 10K
R1143	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1144	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1145	174364	93697-421	RES CMF 1/8W 5% 10K
R1146	181065	93697-419	RES CMF 1/8W 5% 8.2K
R1147	180325	93697-428	RES CMF 1/8W 5% 20K
R1148	180325	93697-428	RES CMF 1/8W 5% 20K
R1149	174364	93697-421	RES CMF 1/8W 5% 10K
R1150	174364	93697-421	RES CMF 1/8W 5% 10K
R1151	197621	1B14213-18A	RES CMF 1/10W 5% 18K
R1152	181065	93697-419	RES CMF 1/8W 5% 8.2K
R1153	181065	93697-419	RES CMF 1/8W 5% 8.2K
R1154	174354	93697-433	RES CMF 1/8W 5% 33K
R1155	174350	93697-437	RES CMF 1/8W 5% 47K
R1156	829022	993272-357	* RES CFFP 1/4W 5% 22R
R1158	181483	93697-410	RES CMF 1/8W 5% 3.6K
R1159	206729	1B14212-24A	RES CMF 1/10W 5% 2.4K
R1160	192100	1B14212-10A	RES CMF 1/10W 5% 1K
U1125	176226	1421837-001	IC TONE/VOL/BALANCE
U1126	204290	1A51133-01A	IC DIG AUDIO CONT
U1127	149018	1421754-001	IC OP AMP

BLACK STRETCH ADAPTER

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
		2F25006-503	● CIRCUIT COMPLETE CTC169BU (USE 2F25006-513)
	210880	2F25006-513	● CIRCUIT COMPLETE CTC169BU,PB,PU,PV
		2F25006-504	● CIRCUIT COMPLETE CTC169BT,BW (USE 2F25006-514)
	210905	2F25006-514	● CIRCUIT COMPLETE CTC169BT,BW,PA,PD,PT, PW,PX (SEE NOTE@)
	217008	2F25006-516	● CIRCUIT COMPLETE CTC169PC,PX (SEE NOTE@)
	226092	2F25006-520	● CIRCUIT COMPLETE CTC169PE,PH,PJ
	226156	2F25006-521	● CIRCUIT COMPLETE CTC169PF,PG,PK,PM
C6401	216804	XX11007-472	CAP LYTC 1UF M 50V
C6402	174412	2861143-64A	CAPCC 100PF J NPO 50V CTC169BT,BU,BW (SEE NOTE@)
C6402	174408	2861142-94A	CAPCC 33PF J NPO 50V CTC169BT,BW,PA,PB,PC, PD,PE,PF,PG,PH,PJ,PK, PM,PT,PU,PV,PW,PX (SEE NOTE@)
C6403	174423	2861146-35Z	CAPCC .01UF K X7R 50V (.12x.06)(SEE NOTE@)
C6403	215555	XX40432-770	CAPCC .01UF K X7R 50V (.08x.05)(SEE NOTE@)
C6404	174402	2861142-32A	CAPCC 10PF F NPO 50V CTC169BT,BU,BW (SEE NOTE@)
C6404	174409	2861143-24A	CAPCC 47PF J NPO 50V CTC169BT,BW,PA,PB,PC, PD,PE,PF,PG,PH,PJ,PK, PM,PT,PU,PV,PW,PX (SEE NOTE@)
C6405	176851	1C30120-33A	CAP LYTC 33UF M 16V
C6406	189981	2821726-141	CAP LYTC 10UF M 25V
C6407	174412	2861143-64A	CAPCC 100PF J NPO 50V
C6408	176828	2861143-54A	CAPCC 82PF J NPO 50V
C6409	174402	2861142-32A	CAPCC 10PF F NPO 50V
C6412	193043	1C30230-47A	CAP LYTC 47UF M 25V
C6413	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C6414	189981	1C30150-10A	CAP LYTC 10UF M 50V
C6415	220998	1C30179-10A	CAP LYTC 1UF M 100V
C6416	216804	XX11007-472	CAP LYTC 1UF M 50V CTC169BT,BU,BW (SEE NOTE@)
C6416	207854	XX11011-307	CAP LYTC .47UF M 50V CTC169BT,BW,PA,PB,PC, PD,PE,PF,PG,PH,PJ,PK, PM,PT,PU,PV,PW,PX (SEE NOTE@)
C6417	174416	2861144-55A	CAPCC 470PF K NPO 50V
C6418	207867	XX90541-830	CAP LYTC 3.3UF M 50V

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
C6419	207867	XX90541-830	CAP LYTC 3.3UF M 50V
C6420	178188	2861144-14A	CAPCC 220PF J NPO 50V
C6421	178188	2861144-14A	CAPCC 220PF J NPO 50V
C6422	201132	2861145-75Z	CAPCC 3900PF K X7R 50V
C6423	190548	2861145-85Z	CAPCC 4700PF K X7R 50V
C6424	174422	2861145-55Z	CAPCC 2700PF K X7R 50V (SEE NOTE@)
C6424	181085	2861145-65Z	CAPCC 3300PF K X7R 50V (SEE NOTE@)
C6425	201163	2861147-45Z	CAPCC .068UF K X7R 50V
C6426	190499	1C30179-47A	CAP LYTC 4.7UF M 100V
C6427	208429	XX43329-660	CAP LYTC 47UF M 16V
C6430	216802	XX20438-725	CAP LYTC 10UF M 16V
C6431	220998	1C30179-10A	CAP LYTC 1UF M 100V
CR6401	164717	1471872-006	DIODE
CR6402	164717	1471872-006	DIODE
CR6403	164717	1471872-006	DIODE
J6404	201137	XX10004-980	CONNECTOR 6 PIN CONVER CTC169BT,BU,BW,PA,PB PC,PD,PT,PU,PV,PW,PX
J6404	226331	XX40452-300	CONNECTOR 6 PIN CONVER CTC169PE,PF,PG,PH,PJ, PK,PM
L6401	200161	1C51100-33A	COIL CTC169BT,BU,BW
L6401	195712	1C51100-22A	COIL 22UH CTC169BT,BW,PA,PB,PC, PD,PE,PF,PG,PH,PJ,PK, PM,PT,PU,PV,PW,PX
L6402	195712	1C51100-22A	COIL 22UH
L6403	195750	1C51101-12A	COIL 120UH
L6406	176622	1C51101-47A	COIL
Q6401	179740	1417500-001	TRANSISTOR LUMA AMP (SEE NOTE@)
Q6401	215495	XX11070-770	TRANSISTOR LUMA AMP (SEE NOTE@)
Q6402	179740	1417500-001	TRANSISTOR S-LUMA SW (SEE NOTE@)
Q6402	215495	XX11070-770	TRANSISTOR S-LUMA SW (SEE NOTE@)
Q6403	179741	1417501-001	TRANSISTOR S-LUMA SW (SEE NOTE@)
Q6403	215496	XX30946-660	TRANSISTOR S-LUMA SW (SEE NOTE@)
Q6404	179740	1417500-001	TRANSISTOR S-LUMA SW (SEE NOTE@)
Q6404	215495	XX11070-770	TRANSISTOR S-LUMA SW (SEE NOTE@)
Q6405	179740	1417500-001	TRANSISTOR CHROMA BUFF (SEE NOTE@)
Q6405	215495	XX11070-770	TRANSISTOR CHROMA BUFF (SEE NOTE@)
Q6406	179741	1417501-001	TRANSISTOR VIDEO AMP (SEE NOTE@)
Q6406	215496	XX30946-660	TRANSISTOR VIDEO AMP (SEE NOTE@)
Q6407	179740	1417500-001	TRANSISTOR VIDEO BUFF (SEE NOTE@)
Q6407	215495	XX11070-770	TRANSISTOR VIDEO BUFF (SEE NOTE@)
Q6408	146847	1417306-013	TRANSISTOR LUMA AMP
Q6409	179741	1417501-001	TRANSISTOR LUMA AMP (SEE NOTE@)
Q6409	215496	XX30946-660	TRANSISTOR LUMA AMP (SEE NOTE@)
Q6410	146847	1417306-013	TRANSISTOR LUMA AMP
Q6411	179741	1417501-001	TRANSISTOR BUFFER (SEE NOTE@)
Q6411	215496	XX30946-660	TRANSISTOR BUFFER (SEE NOTE@)
Q6412	179741	1417501-001	TRANSISTOR BUFFER (SEE NOTE@)
Q6412	215496	XX30946-660	TRANSISTOR BUFFER (SEE NOTE@)
Q6413	179741	1417501-001	TRANSISTOR BUFFER (SEE NOTE@)
Q6413	215496	XX30946-660	TRANSISTOR BUFFER (SEE NOTE@)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
Q6414	179740	1417500-001	TRANSISTOR AMP (SEE NOTE@)
Q6414	215495	XX11070-770	TRANSISTOR AMP (SEE NOTE@)
Q6415	179741	1417501-001	TRANSISTOR LUMA AMP (SEE NOTE@)
Q6415	215496	XX30946-660	TRANSISTOR LUMA AMP (SEE NOTE@)
Q6416	179741	1417501-001	TRANSISTOR LUMA BUFFER (SEE NOTE@)
Q6416	215496	XX30946-660	TRANSISTOR LUMA BUFFER (SEE NOTE@)
Q6417	179740	1417500-001	TRANSISTOR LIMITER (SEE NOTE@)
Q6417	215495	XX11070-770	TRANSISTOR LIMITER (SEE NOTE@)
Q6418	179740	1417500-001	TRANSISTOR LIMITER (SEE NOTE@)
Q6418	215495	XX11070-770	TRANSISTOR LIMITER (SEE NOTE@)
Q6419	179740	1417500-001	TRANSISTOR LIMITER (SEE NOTE@)
Q6419	215495	XX11070-770	TRANSISTOR LIMITER (SEE NOTE@)
Q6420	179740	1417500-001	TRANSISTOR VERT SYNC (SEE NOTE@)
Q6420	215495	XX11070-770	TRANSISTOR VERT SYNC (SEE NOTE@)
Q6421	179741	1417501-001	TRANSISTOR SYNC (SEE NOTE@)
Q6421	215496	XX30946-660	TRANSISTOR SYNC (SEE NOTE@)
Q6422	179740	1417500-001	TRANSISTOR VERT SYNC (SEE NOTE@)
Q6422	215495	XX11070-770	TRANSISTOR VERT SYNC (SEE NOTE@)
Q6423	179740	1417500-001	TRANSISTOR HORIZ SYNC (SEE NOTE@)
Q6423	215495	XX11070-770	TRANSISTOR HORIZ SYNC (SEE NOTE@)
Q6424	146847	1417306-013	TRANSISTOR DEFEAT SW
Q6425	179740	1417500-001	TRANSISTOR GATE (SEE NOTE@)
Q6425	215495	XX11070-770	TRANSISTOR GATE (SEE NOTE@)
R6401	175055	2819434-697	RES CF 1/4W 2% 1K
R6402	181079	93697-705	RES CMF 1/8W 2% 2.2K
R6403	174366	93697-727	RES CMF 1/8W 2% 18K
R6404	174364	93697-721	RES CMF 1/8W 2% 10K
R6405	200173	93697-388	RES CMF 1/8W 5% 430R
R6406	174367	93697-429	RES CMF 1/8W 5% 22K
R6407	178287	93697-713	RES CMF 1/8W 2% 4.7K
R6408	178285	93697-724	RES CMF 1/8W 2% 13K (SEE NOTE@)
R6408	192835	93697-725	RES CMF 1/8W 2% 15K (SEE NOTE@)
R6409	174364	93697-421	RES CMF 1/8W 5% 10K
R6410	155137	93697-391	RES CMF 1/8W 5% 560R CTC169BT,BW,PA,PD, PE,PF,PG,PH,PJ,PK, PM,PT,PU,PV,PW,PX
R6410	180369	93697-404	RES CMF 1/8W 5% 2K CTC169BU,PB,PU,PV
R6411	178281	XX70433-190	RES CMF 1/8W 5% 6.8K
R6412	162001	93697-401	RES CMF 1/8W 5% 1.5K
R6414	182823	93697-400	RES CMF 1/8W 5% 1.3K CTC169BT,BU,BW,PA,PB, PD,PE,PH,PJ,PT,PU,PV, PW-USING 2F25006-514
R6414	181161	93697-005	RES CMF 1/8W 5% .05R CTC169PC,PF,PG,PK, PM,PX USING 2F25006-516
R6416	175317	2819434-421	RES CF 1/4W 5% 10K
R6417	181482	93697-701	RES CMF 1/8W 2% 1.5K
R6418	181488	93697-385	RES CMF 1/8W 5% 330R (SEE NOTE@)
R6418	178286	93697-693	RES CMF 1/8W 2% 680R (SEE NOTE@)
R6419	176816	93697-445	RES CMF 1/8W 5% 100K
R6420	181484	93697-703	RES CMF 1/8W 2% 1.8K

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R6421	181482	93697-701	RES CMF 1/8W 2% 1.5K
R6422	176814	93697-695	RES CMF 1/8W 2% 820R CTC169BT,BU,BW (SEE NOTE@)
R6422	190462	93697-697	RES CMF 1/8W 2% 1K CTC169BT,BW,PA,PB,PC, PD,PE,PF,PG,PH,PJ,PK, PM,PT,PU,PV,PW,PX (SEE NOTE@)
R6423	181056	93697-694	RES CMF 1/8W 2% 750R
R6424	181493	93697-692	RES CMF 1/8W 2% 620R
R6425	178286	93697-693	RES CMF 1/8W 2% 680R
R6426	190461	93697-688	RES CMF 1/8W 2% 430R CTC169BT,BU,BW (SEE NOTE@)
R6426	178284	93697-687	RES CMF 1/8W 2% 390R CTC169BT,BW,PA,PB,PC, PD,PE,PF,PG,PH,PJ,PK, PM,PT,PU,PV,PW,PX (SEE NOTE@)
R6427	178299	93697-415	RES CMF 1/8W 5% 5.6K
R6428	181483	93697-410	RES CMF 1/8W 5% 3.6K CTC169BT,BU,BW (SEE NOTE@)
R6428	181161	93697-005	RES CMF 1/8W 5% .05R CTC169BT,BW,PA,PB,PC, PD,PE,PF,PG,PH,PJ,PK, PM,PT,PU,PV,PW,PX (SEE NOTE@)
R6443	181496	93697-416	RES CMF 1/8W 5% 6.2K CTC169BT,BU,BW,PA,PB, PD,PE,PH,PJ,PT,PU,PV, PW-USING 2F25006-514
R6443	178287	93697-713	RES CMF 1/8W 2% 4.7K CTC169PC,PF,PG,PK, PM,PX USING 2F25006-516
R6444	174348	93697-397	RES CMF 1/8W 5% 1K
R6445	200186	2819434-349	RES CF 1/4W 5% 10R
R6446	180329	93697-465	RES CMF 1/8W 5% 680K
R6447	181056	93697-694	RES CMF 1/8W 2% 750R CTC169BT,BU,BW,PA,PB, PC,PD,PE,PF,PG,PH,PJ, PK,PM,PT,PU,PV,PW, PX (SEE NOTE@)
R6447	181493	93697-692	RES CMF 1/8W 2% 620R CTC169PA,PD,PT,PW,PX (SEE NOTE@)
R6448	190525	2821716-301	RES CONTROL SYNC AMP ADJUST
R6449	175418	93697-414	RES CMF 1/8W 5% 5.1K
R6450	182823	93697-400	RES CMF 1/8W 5% 1.3K
R6451	155007	XX70433-140	RES CMF 1/8W 5% 1.2K
R6452	181496	93697-416	RES CMF 1/8W 5% 6.2K
R6453	174348	93697-397	RES CMF 1/8W 5% 1K
R6454	174348	93697-397	RES CMF 1/8W 5% 1K
R6455	174361	93697-469	RES CMF 1/8W 5% 1M
R6456	174365	93697-423	RES CMF 1/8W 5% 12K
R6457	192835	XX40437-550	RES CMF 1/8W 5% 15K
R6458	176818	93697-373	RES CMF 1/8W 5% 100R
R6459	162003	93697-393	RES CMF 1/8W 5% 680R
R6460	181080	93697-409	RES CMF 1/8W 5% 3.3K
R6461	176367	93697-365	RES CMF 1/8W 5% 47R
R6462	181057	93697-398	RES CMF 1/8W 5% 1.1K
R6463	174348	93697-397	RES CMF 1/8W 5% 1K
R6464	176818	93697-373	RES CMF 1/8W 5% 100R
R6465	178196	93697-399	RES CMF 1/8W 5% 1.2K CTC169BT,BU,BW (SEE NOTE@)
R6465	190462	93697-697	RES CMF 1/8W 2% 1K CTC169BT,BW,PA,PB,PC, PD,PE,PF,PG,PH,PJ,PK, PM,PT,PU,PV,PW,PX (SEE NOTE@)
R6466	162001	93697-401	RES CMF 1/8W 5% 1.5K
R6467	162986	93697-183	RES CMF 1/8W 10% 3.9M
R6468	174350	93697-413	RES CMF 1/8W 5% 4.7K
R6469	174365	93697-423	RES CMF 1/8W 5% 12K (SEE NOTE@)
R6469	174364	93697-721	RES CMF 1/8W 2% 10K (SEE NOTE@)
R6470	175890	XX90573-680	RES CMF 1/8W 2% 3.9K
R6471	178281	XX70433-190	RES CMF 1/8W 5% 6.8K
R6472	162006	93697-411	RES CMF 1/8W 5% 3.9K (SEE NOTE@)
R6472	174350	93697-413	RES CMF 1/8W 5% 4.7K (SEE NOTE@)
R6473	176818	93697-373	RES CMF 1/8W 5% 100R
R6474	181072	93697-412	RES CMF 1/8W 5% 4.3K
R6475	176366	93697-405	RES CMF 1/8W 5% 2.2K
R6476	181496	93697-416	RES CMF 1/8W 5% 6.2K (SEE NOTE@)
R6476	181058	93697-716	RES CMF 1/8W 2% 6.2K CTC169BT,BU,BW,PA,PB, PC,PD,PE,PF,PG,PH,PJ, PK,PM,PT,PU,PV,PW, PX (SEE NOTE@)
R6477	174368	93697-432	RES CMF 1/8W 5% 30K
R6478	174349	93697-407	RES CMF 1/8W 5% 2.7K (SEE NOTE@)
R6478	181064	93697-707	RES CMF 1/8W 2% 2.7K CTC169BT,BU,BW,PA,PB, PC,PD,PE,PF,PG,PH,PJ, PK,PM,PT,PU,PV,PW, PX (SEE NOTE@)
R6479	176818	93697-373	RES CMF 1/8W 5% 100R
R6480	174349	93697-407	RES CMF 1/8W 5% 2.7K
R6481	181491	93697-379	RES CMF 1/8W 5% 180R
R6482	176818	93697-373	RES CMF 1/8W 5% 100R
R6483	200186	2819434-349	RES CF 1/4W 5% 10R
R6484	193061	XX60443-730	RES CMF 1/8W 5% 27K
R6485	174350	93697-413	RES CMF 1/8W 5% 4.7K CTC169BT,BU,BW (SEE NOTE@)
R6485	162001	93697-401	RES CMF 1/8W 5% 1.5K CTC169BT,BW,PA,PB,PC, PD,PE,PF,PG,PH,PJ,PK, PM,PT,PU,PV,PW,PX (SEE NOTE@)
R6486	174353	XX30943-060	RES CMF 1/8W 5% 220K
R6487	829010	993272-349 *	RES CFFP 1/4W 5% 10R
R6488	178280	93697-680	RES CMF 1/8W 2% 200R CTC169BT,BW,PA,PD,PT, PW-USING 2F25006-514
R6488	174342	93697-367	RES CMF 1/8W 5% 56R CTC169PC,PX-USING 2F25006-516
U6401	201146	1A51124-01A	IC BLK STR PROCESSOR
	154385	2870929-004	STANDOFF, WIRE
	215867	2870929-004	WIRE SADDLE, TWIST END

CONVERGENCE CBA

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	203052	2F45001-501 ●	CIRCUIT COMPLETE CTC169BL,BM,BN,BT, BU,BW,HM,HN,PA,PB, PC,PD,PM,PT,PU,PV, PW,PX
C8101	191959	1C30130-47A	CAP LYTC 47UF M 25V
C8102	147971	2841255-31M	CAPCD .01UF M Z5P 50V
C8103	189981	1C30150-10A	CAP LYTC 10UF M 50V (SEE NOTE@)
C8103	189991	1C30179-10A	CAP LYTC 1UF M 100V (SEE NOTE@)
C8104	191959	1C30130-47A	CAP LYTC 47UF M 25V
C8105	146451	1C30131-10A	CAP LYTC 100UF M 25V (SEE NOTE@)
C8105	191959	1C30130-47A	CAP LYTC 47UF M 25V (SEE NOTE@)
C8106	176851	1C30120-33A	CAP LYTC 33UF M 16V (SEE NOTE@)
C8106	189991	1C30179-10A	CAP LYTC 1UF M 100V (SEE NOTE@)
C8107	189981	1C30150-10A	CAP LYTC 10UF M 50V
C8108	191959	1C30130-47A	CAP LYTC 47UF M 25V
C8109	189981	1C30150-10A	CAP LYTC 10UF M 50V (SEE NOTE@)

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
C8109	189991	1C30179-10A	CAP LYTC 1UF M 100V (SEE NOTE@)
C8110	191959	1C30130-47A	CAP LYTC 47UF M 25V
C8111	189981	1C30150-10A	CAP LYTC 10UF M 50V (SEE NOTE@)
C8111	215899	XX11073-770	CAP POLY 3.3UF K 50V (SEE NOTE@)
C8112	176851	1C30120-33A	CAP LYTC 33UF M 16V (SEE NOTE@)
C8112	189991	1C30179-10A	CAP LYTC 1UF M 100V (SEE NOTE@)
C8113	189981	1C30150-10A	CAP LYTC 10UF M 50V
C8114	190520	2821714-128	CAP POLY .22UF M 63V
C8115	191959	1C30130-47A	CAP LYTC 47UF M 25V
C8116	204282	2821714-124	CAP POLY .1UF M 63V
C8118	189981	1C30150-10A	CAP LYTC 10UF M 50V
C8119	191959	1C30130-47A	CAP LYTC 47UF M 25V
C8120	191959	1C30130-47A	CAP LYTC 47UF M 25V
C8121	191959	1C30130-47A	CAP LYTC 47UF M 25V
C8123	146451	1C30131-10A	CAP LYTC 100UF M 25V (SEE NOTE@)
C8123	191959	1C30130-47A	CAP LYTC 47UF M 25V (SEE NOTE@)
C8125	176851	1C30120-33A	CAP LYTC 33UF M 16V (SEE NOTE@)
C8125	189991	1C30179-10A	CAP LYTC 1UF M 100V (SEE NOTE@)
C8126	189981	1C30150-10A	CAP LYTC 10UF M 50V
C8128	189991	1C30179-10A	CAP LYTC 1UF M 100V
C8129	181099	2821714-330	CAP POLY .33UF J 50V
C8130	190519	2821714-120	CAP POLY .047UF M 63V
C8132	143874	2841252-82M	CAPCD 150PF K Z5P 50V
C8133	143878	2841253-62M	CAPCD 560PF K Z5P 50V
C8134	191959	1C30130-47A	CAP LYTC 47UF M 25V
C8135	189981	1C30150-10A	CAP LYTC 10UF M 50V
C8137	191959	1C30130-47A	CAP LYTC 47UF M 25V
C8138	189981	1C30150-10A	CAP LYTC 10UF M 50V
C8140	191959	1C30130-47A	CAP LYTC 47UF M 25V
C8143	204282	2821714-124	CAP POLY .1UF M 63V
C8144	191959	1C30130-47A	CAP LYTC 47UF M 25V
C8145	191959	1C30130-47A	CAP LYTC 47UF M 25V
C8146	189981	1C30150-10A	CAP LYTC 10UF M 50V
C8148	189981	1C30150-10A	CAP LYTC 10UF M 50V
C8156	189981	1C30150-10A	CAP LYTC 10UF M 50V
C8161	191959	1C30130-47A	CAP LYTC 47UF M 25V
C8164	181099	2821714-330	CAP POLY .33UF J 50V (SEE NOTE@)
C8164	195691	1C30179-22A	CAP LYTC 2.2UF M 100V (SEE NOTE@)
C8201	193580	2821726-541	CAP LYTC 47UF M 25V
C8202	193580	2821726-541	CAP LYTC 47UF M 25V
C8203	146256	2821726-141	CAP LYTC 10UF M 25V (SEE NOTE@)
C8203	193580	2821726-541	CAP LYTC 47UF M 25V (SEE NOTE@)
C8204	146256	2821726-141	CAP LYTC 10UF M 25V (SEE NOTE@)
C8204	193580	2821726-541	CAP LYTC 47UF M 25V (SEE NOTE@)
C8205	193580	2821726-541	CAP LYTC 47UF M 25V
C8206	193580	2821726-541	CAP LYTC 47UF M 25V
C8207	146256	2821726-141	CAP LYTC 10UF M 25V (SEE NOTE@)
C8207	193580	2821726-541	CAP LYTC 47UF M 25V (SEE NOTE@)
C8208	146256	2821726-141	CAP LYTC 10UF M 25V (SEE NOTE@)
C8208	193580	2821726-541	CAP LYTC 47UF M 25V (SEE NOTE@)
C8209	146256	2821726-141	CAP LYTC 10UF M 25V (SEE NOTE@)
C8209	193580	2821726-541	CAP LYTC 47UF M 25V (SEE NOTE@)
C8210	146256	2821726-141	CAP LYTC 10UF M 25V (SEE NOTE@)
C8210	193580	2821726-541	CAP LYTC 47UF M 25V (SEE NOTE@)
C8211	146256	2821726-141	CAP LYTC 10UF M 25V (SEE NOTE@)
C8211	193580	2821726-541	CAP LYTC 47UF M 25V (SEE NOTE@)
C8212	146256	2821726-141	CAP LYTC 10UF M 25V (SEE NOTE@)
C8212	193580	2821726-541	CAP LYTC 47UF M 25V (SEE NOTE@)
C8213	197599	1C30259-10A	CAP LYTC 1UF M 50V (SEE NOTE@)
C8213	195691	1C30279-22A	CAP LYTC 2.2UF M 100V (SEE NOTE@)
C8214	190520	2821714-228	CAP POLY .22UF K 63V
C8218	204282	2821714-124	CAP POLY .1UF M 63V
C8219	204282	2821714-124	CAP POLY .1UF M 63V
C8220	204282	2821714-124	CAP POLY .1UF M 63V
C8221	204282	2821714-124	CAP POLY .1UF M 63V
C8222	204282	2821714-124	CAP POLY .1UF M 63V
C8223	204282	2821714-124	CAP POLY .1UF M 63V
C8225	147971	2841255-32M	CAPCD .01UF K Z5P 50V
C8226	204282	2821714-124	CAP POLY .1UF M 63V
C8227	181840	2821714-132	CAP POLY .47UF M 63V
C8228	189981	1C30150-10A	CAP LYTC 10UF M 50V
C8229	204282	2821714-124	CAP POLY .1UF M 63V
C8230	189981	1C30150-10A	CAP LYTC 10UF M 50V
C8231	204284	2821714-108	CAP POLY 4700PF M 63V
C8234	204282	2821714-124	CAP POLY .1UF M 63V
C8235	143879	2841253-92M	CAPCD 1000PF K Z5P 50V
C8236	190519	2821714-120	CAP POLY .047UF M 63V
C8237	189991	1C30179-10A	CAP LYTC 1UF M 100V
C8238	189991	1C30179-10A	CAP LYTC 1UF M 100V
C8239	204285	2841253-12J	CAPCD 220PF K SL 50V
C8240	143878	2841253-62M	CAPCD 560PF K Z5P 50V
CR8102	164717	1471872-006	DIODE
CR8103	164717	1471872-006	DIODE
CR8104	164717	1471872-006	DIODE
CR8105	164717	1471872-006	DIODE
CR8106	176666	99201-120	DIODE ZENER 15V .4W
CR8107	164717	1471872-006	DIODE
CR8108	176296	1476171-031	DIODE (SEE NOTE@)
CR8108	130047	99201-116	DIODE ZENER 10V .4W (SEE NOTE@)
CR8109	164874	1471872-010	DIODE
CR8110	164874	1471872-010	DIODE
CR8111	164874	1471872-010	DIODE
CR8112	130044	99201-216	DIODE ZENER 10V .4W
FB8001	152103	2843117-002	BEAD FERRITE
J8104	204286	XX80312-100	CONNECTOR 8 PIN AUX
J8202	204287	XX70308-200	CONNECTOR 7 PIN AUX
J8203	204288	XX10817-300	CONNECTOR 6 PIN BLK STR
Q8101	146847	1417306-013	TRANSISTOR BUFFER
Q8102	146847	1417306-013	TRANSISTOR BUFFER
Q8103	146847	1417306-013	TRANSISTOR BUFFER
Q8104	146847	1417306-013	TRANSISTOR BUFFER
Q8105	146847	1417306-013	TRANSISTOR SWITCH
Q8106	146847	1417306-013	TRANSISTOR BUFFER
Q8107	143802	1417330-010	TRANSISTOR CURRENT SOURCE
Q8108	146847	1417306-013	TRANSISTOR RESET SW
Q8109	143802	1417330-010	TRANSISTOR CLAMP
Q8110	143802	1417330-010	TRANSISTOR BUFFER
Q8111	146847	1417306-013	TRANSISTOR BUFFER
Q8112	143802	1417330-010	TRANSISTOR CLAMP
Q8113	143802	1417330-010	TRANSISTOR BUFFER
Q8114	143802	1417330-010	TRANSISTOR BUFFER
Q8116	146847	1417306-013	TRANSISTOR BUFFER
Q8117	146847	1417306-013	TRANSISTOR SWITCH
Q8120	146847	1417306-013	TRANSISTOR BUFFER
Q8121	146847	1417306-013	TRANSISTOR RESET SW
Q8122	143802	1417330-010	TRANSISTOR CURRENT SOURCE
Q8123	143802	1417330-010	TRANSISTOR BUFFER
Q8124	143802	1417330-010	TRANSISTOR CLAMP
Q8128	143802	1417330-010	TRANSISTOR BUFFER
Q8129	146847	1417306-013	TRANSISTOR RESET SW
Q8132	146847	1417306-013	TRANSISTOR CLAMP
Q8133	146847	1417306-013	TRANSISTOR CLAMP
Q8135	146847	1417306-013	TRANSISTOR RESET SW
Q8136	143802	1417330-010	TRANSISTOR CURRENT SOURCE
Q8137	146847	1417306-013	TRANSISTOR GULL WING AMP

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
Q8138	146847	1417306-013	TRANSISTOR RESET SW
R8101	175055	2819434-697	RES CF 1/4W 2% 1K
R8102	175317	2819434-421	RES CF 1/4W 5% 10K
R8103	175890	2819434-411	RES CF 1/4W 5% 3.9K
R8105	175317	2819434-421	RES CF 1/4W 5% 10K
R8106	175047	2819434-415	RES CF 1/4W 5% 5.6K
R8107	175317	2819434-421	RES CF 1/4W 5% 10K
R8108	175353	2819434-412	RES CF 1/4W 5% 4.3K
R8109	175055	2819434-397	RES CF 1/4W 5% 1K
R8110	175317	2819434-421	RES CF 1/4W 5% 10K
R8111	175047	2819434-415	RES CF 1/4W 5% 5.6K
R8112	179317	2819434-394	RES CF 1/4W 5% 750R (SEE NOTE@)
R8112	175055	2819434-697	RES CF 1/4W 2% 1K (SEE NOTE@)
R8113	176646	2819434-379	RES CF 1/4W 5% 180R (SEE NOTE@)
R8113	175354	2819434-684	RES CF 1/4W 2% 300R (SEE NOTE@)
R8114	175317	2819434-421	RES CF 1/4W 5% 10K
R8115	175353	2819434-412	RES CF 1/4W 5% 4.3K
R8116	175317	2819434-421	RES CF 1/4W 5% 10K
R8119	175413	2819434-413	RES CF 1/4W 5% 4.7K
R8120	175317	2819434-421	RES CF 1/4W 5% 10K
R8121	175055	2819434-397	RES CF 1/4W 5% 1K
R8122	179961	2819434-451	RES CF 1/4W 5% 180K
R8123	175041	2819434-423	RES CF 1/4W 5% 12K
R8124	175323	2819434-422	RES CF 1/4W 5% 11K
R8125	175324	2819434-381	RES CF 1/4W 5% 220R
R8126	175047	2819434-415	RES CF 1/4W 5% 5.6K
R8127	175317	2819434-421	RES CF 1/4W 5% 10K
R8128	175353	2819434-412	RES CF 1/4W 5% 4.3K
R8129	175311	2819434-402	RES CF 1/4W 5% 1.6K (SEE NOTE@)
R8129	179318	2819434-408	RES CF 1/4W 5% 3K (SEE NOTE@)
R8130	175357	2819434-357	RES CF 1/4W 5% 22R (SEE NOTE@)
R8130	178187	2819434-664	RES CMF 1/4W 2% 43R (SEE NOTE@)
R8131	175361	2819434-375	RES CF 1/4W 5% 120R (SEE NOTE@)
R8131	176647	2819434-392	RES CF 1/4W 5% 620R (SEE NOTE@)
R8132	175325	2819434-373	RES CF 1/4W 5% 100R (SEE NOTE@)
R8132	176629	2819434-391	RES CF 1/4W 5% 560R (SEE NOTE@)
R8133	179814	2819434-398	RES CF 1/4W 5% 1.1K
R8135	175890	2819434-411	RES CF 1/4W 5% 3.9K
R8136	175761	2819434-418	RES CF 1/4W 5% 7.5K
R8137	175351	2819434-428	RES CF 1/4W 5% 20K
R8138	175317	2819434-421	RES CF 1/4W 5% 10K
R8140	175366	2819434-419	RES CF 1/4W 5% 8.2K
R8146	175314	2819434-433	RES CF 1/4W 5% 33K
R8147	175314	2819434-433	RES CF 1/4W 5% 33K
R8148	175054	2819434-429	RES CF 1/4W 5% 22K
R8149	175360	2819434-425	RES CF 1/4W 5% 15K
R8150	175412	2819434-389	RES CF 1/4W 5% 470R
R8151	175352	2819434-709	RES CF 1/4W 2% 3.3K
R8152	175412	2819434-389	RES CF 1/4W 5% 470R
R8154	175363	2819434-380	RES CF 1/4W 5% 200R
R8155	175314	2819434-433	RES CF 1/4W 5% 33K
R8156	175314	2819434-433	RES CF 1/4W 5% 33K
R8162	175413	2819434-413	RES CF 1/4W 5% 4.7K
R8163	175317	2819434-421	RES CF 1/4W 5% 10K
R8164	179961	2819434-451	RES CF 1/4W 5% 180K
R8165	175323	2819434-422	RES CF 1/4W 5% 11K
R8166	175041	2819434-423	RES CF 1/4W 5% 12K
R8167	175054	2819434-429	RES CF 1/4W 5% 22K
R8168	175412	2819434-389	RES CF 1/4W 5% 470R
R8169	175360	2819434-425	RES CF 1/4W 5% 15K
R8170	175352	2819434-409	RES CF 1/4W 5% 3.3K
R8171	175412	2819434-389	RES CF 1/4W 5% 470R
R8173	175363	2819434-380	RES CF 1/4W 5% 200R
R8184	830A47	2821523-341	RES CFFP 1/2W 5% 4.7R (SEE NOTE@)
R8184	830A43	2821523-340	RES CFFP 1/2W 5% 4.3R (SEE NOTE@)
R8190	175311	2819434-402	RES CF 1/4W 5% 1.6K (SEE NOTE@)
R8190	179318	2819434-408	RES CF 1/4W 5% 3K (SEE NOTE@)
R8191	175357	2819434-357	RES CF 1/4W 5% 22R (SEE NOTE@)
R8191	178187	2819434-664	RES CMF 1/4W 2% 43R (SEE NOTE@)
R8193	181106	2821716-102	RES CONTROL VPAR PERSET
R8194	175319	2819434-410	RES CF 1/4W 5% 3.6K (SEE NOTE@)
R8194	175352	2819434-709	RES CF 1/4W 2% 3.3K (SEE NOTE@)
R8195	175055	2819434-397	RES CF 1/4W 5% 1K
R8196	175047	2819434-415	RES CF 1/4W 5% 5.6K
R8201	176661	2819434-396	RES CF 1/4W 5% 910R
R8202	191389	2821716-203	RES CONTROL BV PIN
R8203	175321	2819434-404	RES CF 1/4W 5% 2K
R8204	191389	2821716-203	RES CONTROL BH PIN
R8205	175311	2819434-402	RES CF 1/4W 5% 1.6K
R8206	191389	2821716-203	RES CONTROL RV PIN
R8207	176631	2819434-400	RES CF 1/4W 5% 1.3K
R8208	191389	2821716-203	RES CONTROL RH PIN
R8209	175321	2819434-404	RES CF 1/4W 5% 2K
R8210	191389	2821716-203	RES CONTROL GV PIN
R8211	176634	2819434-417	RES CF 1/4W 5% 6.8K
R8212	191389	2821716-203	RES CONTROL GH PIN
R8213	175308	2819434-399	RES CF 1/4W 5% 1.2K
R8214	175317	2819434-421	RES CF 1/4W 5% 10K
R8215	191389	2821716-203	RES CONTROL BV KEY
R8216	175308	2819434-399	RES CF 1/4W 5% 1.2K
R8217	191389	2821716-203	RES CONTROL BH KEY
R8218	175321	2819434-404	RES CF 1/4W 5% 2K
R8220	191389	2821716-203	RES CONTROL RV KEY
R8221	175055	2819434-397	RES CF 1/4W 5% 1K
R8222	191389	2821716-203	RES CONTROL RH KEY
R8225	175351	2819434-428	RES CF 1/4W 5% 20K
R8226	191389	2821716-203	RES CONTROL BV BOW
R8227	179316	2819434-416	RES CF 1/4W 5% 6.2K
R8228	191389	2821716-203	RES CONTROL BH LIN
R8229	175314	2819434-433	RES CF 1/4W 5% 33K
R8230	191389	2821716-203	RES CONTROL RV BOW
R8231	176634	2819434-417	RES CF 1/4W 5% 6.8K (SEE NOTE@)
R8231	175417	2819434-414	RES CF 1/4W 5% 5.1K (SEE NOTE@)
R8232	191389	2821716-203	RES CONTROL RH LIN
R8233	175413	2819434-413	RES CF 1/4W 5% 4.7K
R8234	191389	2821716-203	RES CONTROL BV SKEW
R8235	176876	2819434-406	RES CF 1/4W 5% 2.4K
R8236	191389	2821716-203	RES CONTROL BH SIZE
R8237	175366	2819434-419	RES CF 1/4W 5% 8.2K
R8238	191389	2821716-203	RES CONTROL RV SKEW
R8239	175758	2819434-403	RES CF 1/4W 5% 1.8K
R8240	191389	2821716-203	RES CONTROL RH SIZE
R8241	175321	2819434-404	RES CF 1/4W 5% 2K
R8242	191389	2821716-203	RES CONTROL BV SUBKEY
R8243	175043	2819434-395	RES CF 1/4W 5% 820R
R8244	191389	2821716-203	RES CONTROL BH SUBPIN
R8245	175890	2819434-411	RES CF 1/4W 5% 3.9K
R8246	191389	2821716-203	RES CONTROL RV SUBKEY
R8247	176661	2819434-396	RES CF 1/4W 5% 910R
R8248	191389	2821716-203	RES CONTROL RH SUBPIN
R8249	176648	2819434-407	RES CF 1/4W 5% 2.7K
R8250	191389	2821716-203	RES CONTROL BV SIZE
R8251	175055	2819434-397	RES CF 1/4W 5% 1K
R8252	191389	2821716-203	RES CONTROL BH SKEW
R8253	176888	2819434-420	RES CF 1/4W 5% 9.1K
R8254	191389	2821716-203	RES CONTROL RV SIZE
R8255	176876	2819434-406	RES CF 1/4W 5% 2.4K
R8256	191389	2821716-203	RES CONTROL RH SKEW
R8257	176634	2819434-417	RES CF 1/4W 5% 6.8K
R8258	191389	2821716-203	RES CONTROL BV LIN
R8259	175413	2819434-413	RES CF 1/4W 5% 4.7K
R8260	191389	2821716-203	RES CONTROL BH BOW
R8261	175360	2819434-425	RES CF 1/4W 5% 15K
R8262	191389	2821716-203	RES CONTROL RV LIN
R8263	175413	2819434-413	RES CF 1/4W 5% 4.7K
R8264	191389	2821716-203	RES CONTROL RH BOW
R8269	179318	2819434-408	RES CF 1/4W 5% 3K
R8270	191389	2821716-203	RES CONTROL BH SUBLIN
R8271	175321	2819434-404	RES CF 1/4W 5% 2K
R8272	191389	2821716-203	RES CONTROL RH SUBLIN
R8273	175055	2819434-397	RES CF 1/4W 5% 1K

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R8274	191389	2821716-203	RES CONTROL BV SUBPIN
R8275	175367	2819434-401	RES CF 1/4W 5% 1.5K
R8276	191389	2821716-203	RES CONTROL RV SUBPIN
R8277	175317	2819434-421	RES CF 1/4W 5% 10K
R8278	175317	2819434-421	RES CF 1/4W 5% 10K
R8279	175317	2819434-421	RES CF 1/4W 5% 10K
R8280	175317	2819434-421	RES CF 1/4W 5% 10K
R8281	176634	2819434-417	RES CF 1/4W 5% 6.8K
R8282	175317	2819434-421	RES CF 1/4W 5% 10K
R8283	175317	2819434-421	RES CF 1/4W 5% 10K
R8284	176876	2819434-406	RES CF 1/4W 5% 2.4K
R8285	176634	2819434-417	RES CF 1/4W 5% 6.8K
R8286	175317	2819434-421	RES CF 1/4W 5% 10K
R8287	175317	2819434-421	RES CF 1/4W 5% 10K
R8288	175352	2819434-409	RES CF 1/4W 5% 3.3K
R8289	175317	2819434-421	RES CF 1/4W 5% 10K
R8290	175317	2819434-421	RES CF 1/4W 5% 10K
R8291	175317	2819434-421	RES CF 1/4W 5% 10K
R8292	175317	2819434-421	RES CF 1/4W 5% 10K
R8301	175325	2819434-373	RES CF 1/4W 5% 100R
R8302	175325	2819434-373	RES CF 1/4W 5% 100R
R8303	175321	2819434-404	RES CF 1/4W 5% 2K
R8304	175325	2819434-373	RES CF 1/4W 5% 100R
R8305	175325	2819434-373	RES CF 1/4W 5% 100R
R8306	175055	2819434-397	RES CF 1/4W 5% 1K
R8307	175325	2819434-373	RES CF 1/4W 5% 100R
R8308	175325	2819434-373	RES CF 1/4W 5% 100R
R8309	179318	2819434-408	RES CF 1/4W 5% 3K
R8310	175325	2819434-373	RES CF 1/4W 5% 100R
R8311	175325	2819434-373	RES CF 1/4W 5% 100R
R8312	175055	2819434-397	RES CF 1/4W 5% 1K
R8313	175325	2819434-373	RES CF 1/4W 5% 100R
R8314	175325	2819434-373	RES CF 1/4W 5% 100R
R8315	175890	2819434-411	RES CF 1/4W 5% 3.9K
R8316	175325	2819434-373	RES CF 1/4W 5% 100R
R8317	175325	2819434-373	RES CF 1/4W 5% 100R
R8318	175055	2819434-397	RES CF 1/4W 5% 1K
R8320	175046	2819434-432	RES CF 1/4W 5% 330R
R8321	175325	2819434-373	RES CF 1/4W 5% 100R
R8322	176647	2819434-392	RES CF 1/4W 5% 620R (SEE NOTE@)
R8322	175325	2819434-373	RES CF 1/4W 5% 100R (SEE NOTE@)
R8323	175054	2819434-429	RES CF 1/4W 5% 22K
R8324	175325	2819434-373	RES CF 1/4W 5% 100R
R8325	175325	2819434-373	RES CF 1/4W 5% 100R
R8326	175325	2819434-373	RES CF 1/4W 5% 100R
R8327	176647	2819434-392	RES CF 1/4W 5% 620R
R8328	175325	2819434-373	RES CF 1/4W 5% 100R
R8329	175321	2819434-404	RES CF 1/4W 5% 2K
R8330	175325	2819434-373	RES CF 1/4W 5% 100R
R8331	175325	2819434-373	RES CF 1/4W 5% 100R
R8332	175325	2819434-373	RES CF 1/4W 5% 100R
R8333	175055	2819434-397	RES CF 1/4W 5% 1K
R8334	175325	2819434-373	RES CF 1/4W 5% 100R
R8335	175325	2819434-373	RES CF 1/4W 5% 100R
R8336	175314	2819434-433	RES CF 1/4W 5% 33K
R8337	175055	2819434-397	RES CF 1/4W 5% 1K
R8338	175314	2819434-433	RES CF 1/4W 5% 33K
R8339	175413	2819434-413	RES CF 1/4W 5% 4.7K
R8347	175363	2819434-380	RES CF 1/4W 5% 200R
R8348	175363	2819434-380	RES CF 1/4W 5% 200R
R8349	177538	2819434-378	RES CF 1/4W 5% 160R
R8350	175308	2819434-399	RES CF 1/4W 5% 1.2K
R8351	175758	2819434-403	RES CF 1/4W 5% 1.8K
R8352	175367	2819434-401	RES CF 1/4W 5% 1.5K
R8353	175325	2819434-373	RES CF 1/4W 5% 100R
R8354	175325	2819434-373	RES CF 1/4W 5% 100R
R8355	175325	2819434-373	RES CF 1/4W 5% 100R
R8356	175325	2819434-373	RES CF 1/4W 5% 100R
R8357	175321	2819434-404	RES CF 1/4W 5% 2K
R8358	175325	2819434-373	RES CF 1/4W 5% 100R
R8359	175353	2819434-412	RES CF 1/4W 5% 4.3K
R8360	175055	2819434-397	RES CF 1/4W 5% 1K
R8361	179318	2819434-408	RES CF 1/4W 5% 3K
R8362	175325	2819434-373	RES CF 1/4W 5% 100R
R8363	175042	2819434-405	RES CF 1/4W 5% 2.2K
R8364	175325	2819434-373	RES CF 1/4W 5% 100R
R8365	175325	2819434-373	RES CF 1/4W 5% 100R
R8366	179318	2819434-408	RES CF 1/4W 5% 3K
R8367	175047	2819434-415	RES CF 1/4W 5% 5.6K
R8368	175321	2819434-404	RES CF 1/4W 5% 2K

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R8369	175325	2819434-373	RES CF 1/4W 5% 100R
R8370	175325	2819434-373	RES CF 1/4W 5% 100R
R8371	175325	2819434-373	RES CF 1/4W 5% 100R
R8372	175325	2819434-373	RES CF 1/4W 5% 100R
R8373	175325	2819434-373	RES CF 1/4W 5% 100R
R8374	175325	2819434-373	RES CF 1/4W 5% 100R
R8375	175325	2819434-373	RES CF 1/4W 5% 100R
R8376	175325	2819434-373	RES CF 1/4W 5% 100R
R8378	175055	2819434-397	RES CF 1/4W 5% 1K (SEE NOTE@)
R8378	179316	2819434-416	RES CF 1/4W 5% 6.2K (SEE NOTE@)
R8379	176648	2819434-407	RES CF 1/4W 5% 2.7K
R8380	179317	2819434-394	RES CF 1/4W 5% 750R
R8381	179296	2819434-444	RES CF 1/4W 5% 91K
R8383	175413	2819434-413	RES CF 1/4W 5% 4.7K
R8384	829122	993218-381 *	RES CF 1/4W 2% 220R
R8385	829122	993218-381 *	RES CF 1/4W 2% 220R
R8386	175314	2819434-433	RES CF 1/4W 5% 33K
R8387	175317	2819434-421	RES CF 1/4W 5% 10K
R8388	175567	2819434-386	RES CF 1/4W 5% 360R
R8389	175055	2819434-397	RES CF 1/4W 5% 1K
R8390	175319	2819434-410	RES CF 1/4W 5% 3.6K
R8391	175329	2819434-426	RES CF 1/4W 5% 16K
R8392	175326	2819434-431	RES CF 1/4W 5% 27K
R8393	175323	2819434-422	RES CF 1/4W 5% 11K
R8394	175055	2819434-397	RES CF 1/4W 5% 1K
R8395	193334	2819434-466	RES CF 1/4W 5% 750K
R8396	175055	2819434-397	RES CF 1/4W 5% 1K
R8397	176648	2819434-407	RES CF 1/4W 5% 2.7K (SEE NOTE@)
R8397	175366	2819434-419	RES CF 1/4W 5% 8.2K (SEE NOTE@)
R8399	196112	2821716-752	RES CONTROL GV CENTER
R8400	176801	2819434-439	RES CF 1/4W 5% 56K (SEE NOTE@)
R8400	175566	2819434-449	RES CF 1/4W 5% 150K (SEE NOTE@)
R8401	829122	993218-381 *	RES CF 1/4W 2% 220R
R8402	829122	993218-381 *	RES CF 1/4W 2% 220R
R8403	829122	993218-381 *	RES CF 1/4W 2% 220R
R8404	829122	993218-381 *	RES CF 1/4W 2% 220R
R8405	829122	993218-381 *	RES CF 1/4W 2% 220R
R8406	829122	993218-381 *	RES CF 1/4W 2% 220R
R8407	829110	993272-373 *	RES CFFP 1/4W 5% 100R
R8408	175413	2819434-413	RES CF 1/4W 5% 4.7K
R8409	175413	2819434-413	RES CF 1/4W 5% 4.7K
R8410	175317	2819434-421	RES CF 1/4W 5% 10K
R8411	175317	2819434-421	RES CF 1/4W 5% 10K
R8412	179814	2819434-398	RES CF 1/4W 5% 1.1K
R8413	175055	2819434-397	RES CF 1/4W 5% 1K
R8414	175055	2819434-397	RES CF 1/4W 5% 1K (SEE NOTE@)
R8414	175352	2819434-709	RES CF 1/4W 2% 3.3K (SEE NOTE@)
R8415	175412	2819434-389	RES CF 1/4W 5% 470R (SEE NOTE@)
R8415	176661	2819434-396	RES CF 1/4W 5% 910R (SEE NOTE@)
R8416	175761	2819434-418	RES CF 1/4W 5% 7.5K (SEE NOTE@)
R8416	175413	2819434-713	RES CF 1/4W 2% 4.7K (SEE NOTE@)
R8417	175054	2819434-429	RES CF 1/4W 5% 22K (SEE NOTE@)
R8417	175351	2819434-728	RES CF 1/4W 2% 20K (SEE NOTE@)
R8418	175047	2819434-415	RES CF 1/4W 5% 5.6K (SEE NOTE@)
R8418	176876	2819434-706	RES CF 1/4W 2% 2.4K (SEE NOTE@)
R8419	175325	2819434-373	RES CF 1/4W 5% 100R
R8420	175043	2819434-395	RES CF 1/4W 5% 820R
R8421	175325	2819434-373	RES CF 1/4W 5% 100R
R8422	175322	2819434-437	RES CF 1/4W 5% 47K
R8423	191389	2821716-203	RES CONTROL GV LIN
R8424	175314	2819434-433	RES CF 1/4W 5% 33K
R8425	175325	2819434-373	RES CF 1/4W 5% 100R
R8426	175325	2819434-373	RES CF 1/4W 5% 100R
R8427	175317	2819434-421	RES CF 1/4W 5% 10K
R8428	175325	2819434-373	RES CF 1/4W 5% 100R
R8429	175350	2819435-397	RES CF 1/2W 5% 1K

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
U8101	150750	1A51136-01A	IC MODULATOR
U8102	150750	1A51136-01A	IC MODULATOR
U8103	150750	1A51136-01A	IC MODULATOR
U8104	149018	1421754-001	IC BUFFER
U8105	204290	1A51133-01A	IC D/A CONVERTER
U8106	204291	1421755-02A	IC -5V REG
U8107	204292	1A51126-01A	IC INTEGRATOR
U8108	176753	1421755-001	IC -12V REG
U8109	162394	1421753-004	IC +12V REG
U8201	204292	1A51126-01A	IC B CONV AMP
U8202	204292	1A51126-01A	IC R CONV AMP
U8203	204292	1A51126-01A	IC G CONV AMP

CONVERGENCE CBA

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	226113	2F45009-501	● CIRCUIT COMPLETE CTC169PE,PF,PG,PH, PJ,PK,PM
C8101	193043	XX80434-350	CAP LYTC 47UF M 25V
C8103	220998	XX60438-930	CAP LYTC 1UF M 100V
C8104	193043	XX80434-350	CAP LYTC 47UF M 25V
C8105	193043	XX80434-350	CAP LYTC 47UF M 25V
C8106	220998	XX60438-930	CAP LYTC 1UF M 100V
C8107	156239	XX30935-880	CAP LYTC 10UF M 63V
C8108	193043	XX80434-350	CAP LYTC 47UF M 25V
C8109	220998	XX60438-930	CAP LYTC 1UF M 100V
C8110	207865	XX11054-690	CAP LYTC 330UF M 25V
C8111	207865	XX11054-690	CAP LYTC 330UF M 25V
C8112	220998	XX60438-930	CAP LYTC 1UF M 100V
C8113	156239	XX30935-880	CAP LYTC 10UF M 63V
C8114	190520	XX70427-650	CAP POLY .22UF K 63V
C8115	193043	XX80434-350	CAP LYTC 47UF M 25V
C8116	204282	XX50879-950	CAP POLY .1UF M 63V
C8117	193043	XX80434-350	CAP LYTC 47UF M 25V
C8118	156239	XX30935-880	CAP LYTC 10UF M 63V
C8119	193043	XX80434-350	CAP LYTC 47UF M 25V
C8120	193043	XX80434-350	CAP LYTC 47UF M 25V
C8121	193043	XX80434-350	CAP LYTC 47UF M 25V
C8123	193043	XX80434-350	CAP LYTC 47UF M 25V
C8126	156239	XX30935-880	CAP LYTC 10UF M 63V
C8129	181099	XX30935-540	CAP POLY .33UF J 63V
C8130	200153	XX30935-470	CAP POLY .047UF K 63V
C8133	226498	XX30935-480	CAP POLY .18UF K 63V
C8134	193043	1C30130-47A	CAP LYTC 47UF M 25V
C8135	156239	XX30935-880	CAP LYTC 10UF M 63V
C8137	193043	1C30130-47A	CAP LYTC 47UF M 25V
C8138	156239	XX30935-880	CAP LYTC 10UF M 63V
C8140	193043	1C30130-47A	CAP LYTC 47UF M 25V
C8143	204282	XX50879-950	CAP POLY .1UF M 63V
C8144	193043	1C30130-47A	CAP LYTC 47UF M 25V
C8145	193043	1C30130-47A	CAP LYTC 47UF M 25V
C8146	156239	XX30935-880	CAP LYTC 10UF M 63V
C8148	156239	XX30935-880	CAP LYTC 10UF M 63V
C8149	226503	XX90568-120	CAPCC 1000PF J SL 50V
C8150	215889	XX11073-770	CAP POLY 3.3UF K 50V
C8151	215889	XX11073-770	CAP POLY 3.3UF K 50V
C8152	215889	XX11073-770	CAP POLY 3.3UF K 50V
C8161	156239	XX30935-880	CAP LYTC 10UF M 63V
C8164	193043	XX80434-350	CAP LYTC 47UF M 25V
C8165	220998	XX60438-930	CAP LYTC 1UF M 100V
C8201	193043	2821726-541	CAP LYTC 47UF M 25V
C8202	193043	2821726-541	CAP LYTC 47UF M 25V
C8203	193043	2821726-541	CAP LYTC 47UF M 25V
C8204	193043	2821726-541	CAP LYTC 47UF M 25V
C8205	193043	2821726-541	CAP LYTC 47UF M 25V
C8206	193043	2821726-541	CAP LYTC 47UF M 25V
C8207	193043	2821726-541	CAP LYTC 47UF M 25V
C8208	193043	2821726-541	CAP LYTC 47UF M 25V
C8209	193043	2821726-541	CAP LYTC 47UF M 25V
C8210	193043	2821726-541	CAP LYTC 47UF M 25V
C8211	193043	2821726-541	CAP LYTC 47UF M 25V
C8212	193043	2821726-541	CAP LYTC 47UF M 25V
C8213	204294	XX90568-280	CAP POLY 1UF K 63V
C8214	205236	XX11054-190	CAP POLY .68UF K 63V
C8225	195689	XX11059-340	CAPCC .01UF K X7R 50V
C8226	204282	XX50879-950	CAP POLY .1UF M 63V
C8227	204283	XX30935-420	CAP POLY .47UF M 63V
C8228	151119	XX11054-840	CAP LYTC 3.3UF 100V
C8229	204282	XX50879-950	CAP POLY .1UF M 63V
C8230	204294	XX90568-280	CAP POLY 1UF K 63V
C8231	226501	XX80434-130	CAP POLY 2200PF K 100V
C8234	204282	XX50879-950	CAP POLY .1UF M 63V
C8235	226503	XX90568-120	CAPCC 1000PF J SL 50V
C8236	200153	XX70427-630	CAP POLY .047UF M 63V
C8237	220998	XX60438-930	CAP LYTC 1UF M 100V (SEE NOTE@)
C8237	227083	XX50879-980	CAP LYTC .27UF K 63V (SEE NOTE@)
C8238	200139	XX20466-910	CAPCC 560PF J NPO 50V
C8239	178188	XX20466-850	CAPCC 220PF J NPO 50V
C8240	207876	XX60441-430	CAPCC 560PF K X7R 50V
C8241	181100	XX20466-860	CAPCC 330PF J NPO 50V
C8242	156239	XX30935-880	CAP LYTC 10UF M 63V
C8243	156239	XX30935-880	CAP LYTC 10UF M 63V
C8244	193043	XX80434-350	CAP LYTC 47UF M 25V
C8245	193043	XX80434-350	CAP LYTC 47UF M 25V
C8246	193043	XX80434-350	CAP LYTC 47UF M 25V
C8247	207865	XX11054-690	CAP LYTC 330UF M 25V
C8248	207865	XX11054-690	CAP LYTC 330UF M 25V
C8249	220998	XX60438-930	CAP LYTC 1UF M 100V
C8250	220998	XX60438-930	CAP LYTC 1UF M 100V
C8251	156239	XX30935-880	CAP LYTC 10UF M 63V
C8252	220998	XX60438-930	CAP LYTC 1UF M 100V
C8253	215555	XX40432-770	CAPCC .01UF K X7R 50V
C8254	215555	XX40432-770	CAPCC .01UF K X7R 50V
C8255	190551	XX90568-210	CAPCC .022UF K X7R 50V
C8256	190551	XX90568-210	CAPCC .022UF K X7R 50V
C8257	193043	XX60438-950	CAP LYTC 47UF M 25V
C8258	193043	XX60438-950	CAP LYTC 47UF M 25V
C8259	161268	XX40433-330	CAPCD 10PF D NPO 50V
C8260	161268	XX40433-330	CAPCD 10PF D NPO 50V
C8261	226503	XX90568-120	CAPCC 1000PF J SL 50V
C8263	197600	XX11059-320	CAPCC 1000PF K X7R 50V (SEE NOTE@)
C8263	214731	XX80436-850	CAPCC .015UF K X7R 50V (SEE NOTE@)
CR8101	164717	XX70436-540	DIODE
CR8102	164717	XX70436-540	DIODE
CR8103	164717	XX70436-540	DIODE
CR8104	164717	XX70436-540	DIODE
CR8105	226504	XX70438-200	DIODE ZENER 5.6V .5W
CR8106	215487	XX50890-650	DIODE ZENER 6.8V .4W
CR8108	130047	99201-116	DIODE ZENER 10V .4W
CR8109	164874	XX30946-680	DIODE
CR8110	164874	XX30946-680	DIODE
CR8111	164874	XX30946-680	DIODE
CR8112	130044	99201-216	DIODE ZENER 10V .4W
CR8113	164874	XX30946-680	DIODE
J8201	226496	XX11080-730	CONNECTOR 5 PIN ADAPTR
J8202	226502	XX80446-860	CONNECTOR 7 PIN AMP
J8203	226500	XX70425-770	CONNECTOR 4 PIN COMB
J8204	226499	XX50894-560	CONNECTOR 4 PIN POWER
JC801	205408	XX80440-510	RES CMF 1/10W 10% .0R (SEE NOTE@)
JC801	181161	XX50885-530	RES CMF 1/8W 5% .0R (SEE NOTE@)
JC802	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC803	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC804	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC805	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC806	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC808	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC809	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC810	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC811	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC812	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC813	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC814	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC815	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC816	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC817	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC818	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC821	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC822	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC823	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC824	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC825	181161	XX50885-530	RES CMF 1/8W 5% .0R

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
JC826	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC827	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC829	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC831	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC833	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC834	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC835	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC836	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC837	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC839	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC840	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC841	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC842	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC843	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC844	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC845	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC846	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC847	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC848	181161	XX50885-530	RES CMF 1/8W 5% .0R
JC849	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC850	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC851	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC852	205408	XX80440-510	RES CMF 1/10W 10% .0R
JC853	181161	XX50885-530	RES CMF 1/8W 5% .0R
Q8101	215495	XX11070-770	TRANSISTOR BUFFER
Q8102	215495	XX11070-770	TRANSISTOR BUFFER
Q8103	215495	XX11070-770	TRANSISTOR BUFFER
Q8104	215495	XX11070-770	TRANSISTOR BUFFER
Q8105	215495	XX11070-770	TRANSISTOR SWITCH
Q8106	215495	XX11070-770	TRANSISTOR BUFFER
Q8107	215496	XX30946-660	TRANSISTOR SOURCE
Q8108	215495	XX11070-770	TRANSISTOR RESET
Q8110	215496	XX30946-660	TRANSISTOR SWITCH
Q8111	215495	XX11070-770	TRANSISTOR BUFFER
Q8112	215495	XX11070-770	TRANSISTOR SWITCH
Q8113	215496	XX30946-660	TRANSISTOR BUFFER
Q8114	215496	XX30946-660	TRANSISTOR BUFFER
Q8115	215495	XX11070-770	TRANSISTOR SWITCH
Q8116	215495	XX11070-770	TRANSISTOR BUFFER
Q8117	215495	XX11070-770	TRANSISTOR SWITCH
Q8118	215495	XX11070-770	TRANSISTOR COMPARATOR
Q8119	215495	XX11070-770	TRANSISTOR COMPARATOR
Q8120	215495	XX11070-770	TRANSISTOR BUFFER
Q8121	215495	XX11070-770	TRANSISTOR RESET
Q8122	215496	XX30946-660	TRANSISTOR SOURCE
Q8123	215496	XX30946-660	TRANSISTOR BUFFER
Q8124	215496	XX30946-660	TRANSISTOR CLAMP
Q8125	215495	XX11070-770	TRANSISTOR COMPARATOR
Q8126	215495	XX11070-770	TRANSISTOR REFERENCE
Q8127	215495	XX11070-770	TRANSISTQR LIMITER
Q8128	215496	XX30946-660	TRANSISTOR BUFFER
Q8129	215495	XX11070-770	TRANSISTOR RESET
Q8130	215496	XX30946-660	TRANSISTOR COMPARATOR
Q8131	215496	XX30946-660	TRANSISTOR REFERENCE
Q8132	215495	XX11070-770	TRANSISTOR CLAMP
Q8133	215495	XX11070-770	TRANSISTOR CLAMP
Q8135	215495	XX11070-770	TRANSISTOR RESET (SEE NOTE@)
Q8135	214644	XX90618-810	TRANSISTOR RESET (SEE NOTE@)
Q8136	215496	XX30946-660	TRANSISTOR SOURCE
Q8138	215495	XX11070-770	TRANSISTOR RESET SW
Q8139	215495	XX11070-770	TRANSISTOR SWITCH
Q8140	215495	XX11070-770	TRANSISTOR INVERTER
Q8141	215495	XX11070-770	TRANSISTOR SWITCH
Q8142	215495	XX11070-770	TRANSISTOR SWITCH
Q8143	215495	XX11070-770	TRANSISTOR CLAMP
Q8144	215495	XX11070-770	TRANSISTOR REFERENCE
Q8145	215496	XX30946-660	TRANSISTOR CLAMP
Q8146	215495	XX11070-770	TRANSISTOR BUFFER
Q8147	215495	XX11070-770	TRANSISTOR COMPARATOR
Q8148	215495	XX11070-770	TRANSISTOR COMPARATOR
Q8149	215495	XX11070-770	TRANSISTOR FILTER
R8101	175055	XX11059-640	RES CF 1/4W 5% 1K
R8102	192091	XX50886-580	RES CMF 1/10W 5% 2K
R8103	215200	XX50886-560	RES CMF 1/10W 5% 750R
R8105	174364	XX60443-710	RES CMF 1/8W 5% 10K
R8106	205346	XX80440-400	RES CMF 1/10W 5% 5.6K
R8107	195937	XX90574-280	RES CMF 1/10W 2% 10K
R8108	197475	XX11066-450	RES CMF 1/10W 5% 4.3K
R8109	175055	XX11059-640	RES CF 1/4W 5% 1K
R8110	174364	XX60443-710	RES CMF 1/8W 5% 10K
R8111	178299	XX40437-540	RES CMF 1/8W 5% 5.6K
R8112	175367	XX40435-630	RES CF 1/4W 5% 1.5K
R8113	192080	XX30944-260	RES CMF 1/10W 5% 22R
R8114	174364	XX60443-710	RES CMF 1/8W 5% 10K
R8115	197475	XX11066-450	RES CMF 1/10W 5% 4.3K
R8117	175367	XX40435-630	RES CF 1/4W 5% 1.5K
R8118	192080	XX30944-260	RES CMF 1/10W 5% 22R
R8119	192097	XX30944-310	RES CMF 1/10W 5% 4.7K
R8120	174364	XX60443-710	RES CMF 1/8W 5% 10K
R8121	175055	XX11059-640	RES CF 1/4W 5% 1K
R8122	207835	XX20472-020	RES CMF 1/10W 5% 180K
R8123	200169	XX20471-990	RES CMF 1/10W 5% 12K
R8124	197620	XX70434-240	RES CMF 1/10W 5% 11K
R8125	195942	XX90574-400	RES CMF 1/10W 5% 470R
R8127	174364	XX70433-290	RES CMF 1/8W 2% 10K
R8128	197907	XX30944-160	RES CMF 1/10W 2% 3.9K
R8129	201143	XX20471-980	RES CMF 1/10W 5% 6.2K
R8130	173964	XX11064-690	RES CMF 1/8W 5% 91R
R8131	176647	XX80436-980	RES CF 1/4W 5% 620R
R8132	197472	XX50886-550	RES CMF 1/10W 5% 560R
R8133	202586	XX50886-440	RES CMF 1/10W 2% 1.1K
R8135	197907	XX30944-160	RES CMF 1/10W 2% 3.9K
R8136	205348	XX70434-100	RES CMF 1/10W 2% 7.5K
R8138	195937	XX50886-610	RES CMF 1/10W 5% 10K
R8139	175417	XX60441-570	RES CF 1/4W 5% 5.1K
R8140	205348	XX70434-100	RES CMF 1/10W 2% 7.5K
R8141	205351	XX60444-300	RES CMF 1/10W 2% 11K
R8142	205345	XX60444-290	RES CMF 1/10W 2% 5.1K
R8143	175417	XX30939-640	RES CF 1/4W 5% 5.1K (SEE NOTE@)
R8143	179316	XX11059-940	RES CF 1/4W 2% 6.2K (SEE NOTE@)
R8144	201144	XX50886-670	RES CMF 1/10W 5% 1M (SEE NOTE@)
R8144	205360	XX11066-320	RES CMF 1/10W 2% 33K (SEE NOTE@)
R8146	205360	XX80440-420	RES CMF 1/10W 5% 33K
R8147	205360	XX80440-420	RES CMF 1/10W 5% 33K
R8148	192070	XX60444-400	RES CMF 1/10W 5% 22K
R8149	205354	XX70434-250	RES CMF 1/10W 5% 15K
R8150	175758	XX80437-010	RES CF 1/4W 5% 1.8K
R8151	192077	XX11066-440	RES CMF 1/10W 5% 3.3K
R8152	195942	XX90574-400	RES CMF 1/10W 5% 470R
R8154	194923	XX90574-380	RES CMF 1/10W 5% 200R
R8155	205354	XX70434-250	RES CMF 1/10W 5% 15K
R8156	205360	XX80440-420	RES CMF 1/10W 5% 33K
R8158	830A43	XX50887-390	* RES CF 1/2W 5% 4.3R
R8162	192097	XX30944-310	RES CMF 1/10W 5% 4.7K
R8163	195937	XX50886-610	RES CMF 1/10W 5% 10K
R8164	207835	XX20472-020	RES CMF 1/10W 5% 180K
R8165	178277	XX80439-670	RES CMF 1/8W 5% 11K
R8166	200169	XX20471-990	RES CMF 1/10W 5% 12K
R8167	205357	XX70434-110	RES CMF 1/10W 2% 22K
R8168	205294	XX50885-780	RES CMF 1/8W 2% 68K
R8169	205357	XX70434-110	RES CMF 1/10W 2% 22K
R8170	205346	XX80440-400	RES CMF 1/10W 5% 5.6K
R8171	175306	XX60441-750	RES CF 1/4W 2% 68K
R8173	192094	XX30944-220	RES CMF 1/10W 2% 100K
R8174	180369	XX70433-150	RES CMF 1/8W 5% 2K (SEE NOTE@)
R8174	162006	XX40437-530	RES CMF 1/8W 5% 3.9K (SEE NOTE@)
R8175	191389	XX30944-710	RES CONTROL GHR LIN
R8176	200186	XX30939-360	RES CF 1/4W 5% 10R
R8177	176648	XX11059-670	RES CF 1/4W 5% 2.7K
R8178	193343	XX90574-440	RES CMF 1/10W 5% 56K
R8179	197471	XX11066-500	RES CMF 1/10W 5% 68K
R8180	176631	XX11059-650	RES CF 1/4W 5% 1.3K
R8181	195937	XX50886-610	RES CMF 1/10W 5% 10K
R8182	197645	XX50886-600	RES CMF 1/10W 5% 5.1K
R8183	175417	XX60441-570	RES CF 1/4W 5% 5.1K
R8184	830A43	XX50887-390	* RES CF 1/2W 5% 4.3R
R8185	205369	XX70434-280	RES CMF 1/10W 5% 110K
R8186	195937	XX50886-610	RES CMF 1/10W 5% 10K
R8187	192077	XX11066-440	RES CMF 1/10W 5% 3.3K
R8188	195937	XX90574-280	RES CMF 1/10W 2% 10K
R8189	205364	XX50886-460	RES CMF 1/10W 2% 47K
R8190	181496	XX70433-180	RES CMF 1/8W 5% 6.2K
R8191	205330	XX50886-520	RES CMF 1/10W 5% 91R
R8192	197640	XX60444-420	RES CMF 1/10W 5% 150K

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R8193	197640	XX60444-420	RES CMF 1/10W 5% 150K
R8194	197905	XX40438-180	RES CMF 1/10W 2% 2.7K
R8195	175756	XX70430-520	RES CF 1/4W 5% 75R
R8196	197645	XX50886-600	RES CMF 1/10W 5% 5.1K
R8197	195937	XX50886-610	RES CMF 1/10W 5% 10K
R8198	192100	XX20471-950	RES CMF 1/10W 5% 1K
R8199	197473	XX20471-930	RES CMF 1/10W 5% 510R
R8201	192077	XX11066-440	RES CMF 1/10W 5% 3.3K
R8202	191389	XX30944-710	RES CONTROL BV PIN
R8203	174349	XX50885-650	RES CMF 1/8W 5% 2.7K
R8204	191389	XX30944-710	RES CONTROL BH PIN
R8205	178281	XX70433-190	RES CMF 1/8W 5% 6.8K
R8206	191389	XX30944-710	RES CONTROL RV PIN
R8207	181483	XX20471-360	RES CMF 1/8W 5% 3.6K
R8208	191389	XX30944-710	RES CONTROL RH PIN
R8209	207838	XX80440-410	RES CMF 1/10W 5% 7.5K
R8210	191389	XX30944-710	RES CONTROL GV PIN
R8211	197476	XX80440-380	RES CMF 1/10W 5% 1.6K (SEE NOTE@)
R8211	175311	XX50882-990	RES CF 1/4W 5% 1.6K (SEE NOTE@)
R8212	191389	XX30944-710	RES CONTROL GH PIN
R8213	162006	XX40437-530	RES CMF 1/8W 5% 3.9K
R8214	175317	XX30939-480	RES CF 1/4W 5% 10K
R8215	191389	XX30944-710	RES CONTROL BV KEY
R8216	155007	XX70433-140	RES CMF 1/8W 5% 1.2K
R8217	191389	XX30944-710	RES CONTROL BH KEY
R8218	197645	XX50886-600	RES CMF 1/10W 5% 5.1K
R8219	201143	XX20471-980	RES CMF 1/10W 5% 6.2K
R8220	191389	XX30944-710	RES CONTROL RV KEY
R8221	180369	XX70433-150	RES CMF 1/8W 5% 2K
R8222	191389	XX30944-710	RES CONTROLRH KEY
R8224	205354	XX70434-250	RES CMF 1/10W 5% 15K
R8225	197470	XX30944-330	RES CMF 1/10W 5% 20K
R8226	191389	XX30944-710	RES CONTROL BV BOW
R8227	192835	XX40437-550	RES CMF 1/8W 5% 15K
R8228	191389	XX30944-710	RES CONTROL BH LIN
R8229	205360	XX80440-420	RES CMF 1/10W 5% 33K
R8230	191389	XX30944-710	RES CONTROL RV BOW
R8231	179299	XX20469-500	RES CF 1/4W 5% 13K
R8232	191389	XX30944-710	RES CONTROL RH LIN
R8233	178287	XX11064-770	RES CMF 1/8W 5% 4.7K
R8234	191389	XX30944-710	RES CONTROL BV SKEW
R8235	175353	XX20469-480	RES CF 1/4W 5% 4.3K
R8236	191389	XX30944-710	RES CONTROL BH SIZE
R8237	205349	XX11066-460	RES CMF 1/10W 5% 8.2K
R8238	191389	XX30944-710	RES CONTROL RV SKEW
R8239	162006	XX40437-530	RES CMF 1/8W 5% 3.9K (SEE NOTE@)
R8239	174349	XX50885-650	RES CMF 1/8W 5% 2.7K (SEE NOTE@)
R8240	191389	XX30944-710	RES CONTROL RH SIZE
R8241	197907	XX60444-390	RES CMF 1/10W 5% 3.9K
R8242	191389	XX30944-710	RES CONTROL BV SUBKEY
R8243	162001	XX11064-760	RES CMF 1/8W 5% 1.5K
R8244	191389	XX30944-710	RES CONTROL BH SUBPIN
R8245	197907	XX60444-390	RES CMF 1/10W 5% 3.9K
R8246	191389	XX30944-710	RES CONTROL RV SUBKEY
R8247	162001	XX11064-760	RES CMF 1/8W 5% 1.5K
R8248	191389	XX30944-710	RES CONTROL RH SUBPIN
R8249	181496	XX70433-180	RES CMF 1/8W 5% 6.2K
R8250	191389	XX30944-710	RES CONTROL BV SIZE
R8251	175418	XX20471-370	RES CMF 1/8W 5% 5.1K
R8252	191389	XX30944-710	RES CONTROL BH SKEW
R8253	176888	XX11059-680	RES CF 1/4W 5% 9.1K
R8254	191389	XX30944-710	RES CONTROL RV SIZE
R8255	206729	XX20471-970	RES CMF 1/10W 5% 2.4K
R8256	191389	XX30944-710	RES CONTROL RH SKEW
R8257	197643	XX30944-320	RES CMF 1/10W 5% 9.1K
R8258	191389	XX30944-710	RES CONTROL BV LIN
R8259	192097	XX30944-310	RES CMF 1/10W 5% 4.7K
R8260	191389	XX30944-710	RES CONTROL BH BOW
R8261	192835	XX40437-550	RES CMF 1/8W 5% 15K
R8262	191389	XX30944-710	RES CONTROL RV LIN
R8263	192097	XX30944-310	RES CMF 1/10W 5% 4.7K
R8264	191389	XX30944-710	RES CONTROL RH BOW
R8265	181073	XX90573-600	RES CMF 1/8W 5% 7.5K
R8266	179316	XX90571-110	RES CF 1/4W 5% 6.2K
R8267	191389	XX30944-710	RES CONTROL GH SKEW
R8268	175041	XX90571-120	RES CF 1/4W 5% 12K
R8269	175055	XX11059-640	RES CF 1/4W 5% 1K
R8270	191389	XX30944-710	RES CONTROL BH SUBLIN
R8271	162001	XX11064-760	RES CMF 1/8W 5% 1.5K
R8272	191389	XX30944-710	RES CONTROL RH SUBLIN
R8273	181483	XX20471-360	RES CMF 1/8W 5% 3.6K
R8274	191389	XX30944-710	RES CONTROL BV SUBPIN
R8275	181496	XX70433-180	RES CMF 1/8W 5% 6.2K
R8276	191389	XX30944-710	RES CONTROL RV SUBPIN
R8277	191389	XX30944-710	RES CONTROL GVT PIN
R8278	191389	XX30944-710	RES CONTROL GVT KEY
R8279	191389	XX30944-710	RES CONTROL GV KEY
R8280	191389	XX30944-710	RES CONTROL GV BOW
R8281	191389	XX30944-710	RES CONTROL BH LIN
R8282	191389	XX30944-710	RES CONTROL GHL PIN
R8283	180369	XX70433-150	RES CMF 1/8W 5% 2K (SEE NOTE@)
R8283	175321	XX11059-660	RES CF 1/4W 5% 2K (SEE NOTE@)
R8284	175351	XX40435-660	RES CF 1/4W 5% 20K (SEE NOTE@)
R8284	175317	XX30939-480	RES CF 1/4W 5% 10K (SEE NOTE@)
R8285	205552	XX11066-490	RES CMF 1/10W 5% 62K
R8286	205354	XX70434-250	RES CMF 1/10W 5% 15K
R8287	175761	XX40435-650	RES CF 1/4W 5% 7.5K
R8288	197645	XX50886-600	RES CMF 1/10W 5% 5.1K (SEE NOTE@)
R8288	175417	XX60441-570	RES CF 1/4W 5% 5.1K (SEE NOTE@)
R8289	175055	XX11059-640	RES CF 1/4W 5% 1K
R8290	195937	XX50886-610	RES CMF 1/10W 5% 10K
R8291	176366	XX90573-580	RES CMF 1/8W 5% 2.2K
R8292	176366	XX90573-580	RES CMF 1/8W 5% 2.2K
R8293	191389	XX30944-710	RES CONTROL RH SUBLINR
R8294	180369	XX70433-150	RES CMF 1/8W 5% 2K
R8295	829520	XX60441-630	RES CF 1/4W 5% 2M
R8296	191389	XX30944-710	RES CONTROL GH BOW
R8297	162006	XX40437-530	RES CMF 1/8W 5% 3.9K
R8301	218508	XX70434-200	RES CMF 1/10W 5% 100R
R8302	218508	XX70434-200	RES CMF 1/10W 5% 100R
R8303	197907	XX60444-390	RES CMF 1/10W 5% 3.9K
R8304	218508	XX70434-200	RES CMF 1/10W 5% 100R
R8305	218508	XX70434-200	RES CMF 1/10W 5% 100R
R8306	180369	XX70433-150	RES CMF 1/8W 5% 2K
R8307	218508	XX70434-200	RES CMF 1/10W 5% 100R
R8308	218508	XX70434-200	RES CMF 1/10W 5% 100R
R8309	205346	XX80440-400	RES CMF 1/10W 5% 5.6K
R8310	218508	XX70434-200	RES CMF 1/10W 5% 100R
R8311	218508	XX70434-200	RES CMF 1/10W 5% 100R
R8312	192091	XX50886-580	RES CMF 1/10W 5% 2K
R8313	218508	XX70434-200	RES CMF 1/10W 5% 100R
R8314	218508	XX70434-200	RES CMF 1/10W 5% 100R
R8315	207838	XX80440-410	RES CMF 1/10W 5% 7.5K
R8316	218508	XX70434-200	RES CMF 1/10W 5% 100R
R8317	218508	XX70434-200	RES CMF 1/10W 5% 100R
R8318	192091	XX50886-580	RES CMF 1/10W 5% 2K
R8327	192091	XX50886-580	RES CMF 1/10W 5% 2K
R8329	192091	XX50886-580	RES CMF 1/10W 5% 2K
R8335	175043	XX50882-980	RES CF 1/4W 5% 820R
R8336	205360	XX80440-420	RES CMF 1/10W 5% 33K
R8337	208430	XX30939-790	RES CF 1/2W 5% 910R
R8338	205360	XX80440-420	RES CMF 1/10W 5% 33K
R8339	175413	XX40435-640	RES CF 1/4W 5% 4.7K
R8347	176816	XX11065-060	RES CMF 1/8W 2% 100K
R8348	205346	XX80440-400	RES CMF 1/10W 5% 5.6K
R8349	177538	XX30939-430	RES CF 1/4W 5% 160R
R8360	192100	XX20471-950	RES CMF 1/10W 5% 1K
R8368	192091	XX50886-580	RES CMF 1/10W 5% 2K
R8378	197470	XX30944-330	RES CMF 1/10W 5% 20K
R8379	192081	XX50886-590	RES CMF 1/10W 5% 2.7K
R8380	197625	XX60444-260	RES CMF 1/10W 2% 1.6K
R8381	206005	XX50886-620	RES CMF 1/10W 5% 39K
R8382	192097	XX30944-170	RES CMF 1/10W 2% 4.7K
R8383	192097	XX30944-170	RES CMF 1/10W 2% 4.7K
R8384	829122	XX90573-770	* RES CF 1/4W 5% 220R
R8385	829122	XX90573-770	* RES CF 1/4W 5% 220R
R8386	205360	XX80440-420	RES CMF 1/10W 5% 33K
R8387	195937	XX50886-610	RES CMF 1/10W 5% 10K
R8388	192086	XX80440-370	RES CMF 1/10W 5% 150R
R8389	192097	XX30944-170	RES CMF 1/10W 2% 4.7K
R8390	192096	XX80440-320	RES CMF 1/10W 2% 2.2K
R8391	201142	XX30943-210	RES CMF 1/8W 2% 62K
R8392	193061	XX60443-730	RES CMF 1/8W 5% 27K
R8395	205386	XX70434-320	RES CMF 1/10W 5% 750K

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R8396	175055	XX11059-640	RES CF 1/4W 5% 1K
R8397	205349	XX11066-460	RES CMF 1/10W 5% 8.2K
R8399	196112	XX20472-230	RES CONTROL GV CENTER
R8400	197640	XX60444-420	RES CMF 1/10W 5% 150K
R8401	829122	XX90573-770	* RES CF 1/4W 5% 220R
R8402	829122	XX90573-770	* RES CF 1/4W 5% 220R
R8403	829122	XX90573-770	* RES CF 1/4W 5% 220R
R8404	829122	XX90573-770	* RES CF 1/4W 5% 220R
R8405	829122	XX90573-770	* RES CF 1/4W 5% 220R
R8406	829122	XX90573-770	* RES CF 1/4W 5% 220R
R8407	829110	XX30943-330	* RES CF 1/4W 5% 100R
R8408	829110	XX30943-330	RES CF 1/4W 5% 100R
R8409	829110	XX30943-330	RES CF 1/4W 5% 100R
R8410	175413	XX11059-930	RES CF 1/4W 2% 4.7K
R8411	192097	XX30944-170	RES CMF 1/10W 2% 4.7K
R8412	202586	XX50886-570	RES CMF 1/10W 5% 1.1K
R8413	175890	XX80437-110	RES CF 1/4W 2% 3.9K
R8414	192100	XX20471-950	RES CMF 1/10W 5% 1K
R8415	192100	XX20471-950	RES CMF 1/10W 5% 1K
R8416	174348	XX30942-990	RES CMF 1/8W 5% 1K
R8417	201144	XX50886-670	RES CMF 1/10W 5% 1M
R8419	175325	XX50882-950	RES CF 1/4W 5% 100R
R8422	175322	XX40435-670	RES CF 1/4W 5% 47K
R8423	191389	XX30944-710	RES CONTROL GV LIN
R8424	205360	XX80440-420	RES CMF 1/10W 5% 33K
R8427	195937	XX50886-610	RES CMF 1/10W 5% 10K
R8428	218508	XX70434-200	RES CMF 1/10W 5% 100R
R8429	175350	XX30939-800	RES CF 1/2W 5% 1K
R8432	175352	XX50883-000	RES CF 1/4W 5% 3.3K
R8433	175317	XX30939-480	RES CF 1/4W 5% 10K
R8434	205346	XX80440-400	RES CMF 1/10W 5% 5.6K
R8436	175317	XX30939-480	RES CF 1/4W 5% 10K
R8437	195937	XX50886-610	RES CMF 1/10W 5% 10K
R8439	205294	XX50885-780	RES CMF 1/8W 2% 68K
R8440	175324	XX20469-450	RES CF 1/4W 2% 220R
R8441	175324	XX20469-450	RES CF 1/4W 2% 220R
R8442	175324	XX20469-450	RES CF 1/4W 2% 220R
R8443	175324	XX20469-450	RES CF 1/4W 2% 220R
R8444	175324	XX20469-450	RES CF 1/4W 2% 220R
R8445	175324	XX20469-450	RES CF 1/4W 2% 220R
R8446	174369	XX11065-030	RES CMF 1/8W 2% 36K
R8447	205296	XX70433-320	RES CMF 1/8W 2% 91K
R8448	174369	XX11065-030	RES CMF 1/8W 2% 36K
R8449	192077	XX11066-440	RES CMF 1/10W 5% 3.3K
R8451	192097	XX30944-310	RES CMF 1/10W 5% 4.7K
R8452	175418	XX20471-370	RES CMF 1/8W 5% 5.1K
R8453	176365	XX30943-010	RES CMF 1/8W 5% 9.1K
R8454	192087	XX40438-300	RES CMF 1/10W 5% 6.8K
R8455	175360	XX50883-010	RES CF 1/4W 5% 15K
R8456	175326	XX90571-340	RES CFM 1/4W 2% 27K
R8457	197476	XX80440-380	RES CMF 1/10W 5% 1.6K
R8458	162001	XX11064-760	RES CMF 1/8W 5% 1.5K
R8459	175046	XX20469-630	RES CF 1/4W 2% 30K
R8460	175329	XX40435-800	RES CF 1/4W 2% 16K
R8461	205293	XX60443-850	RES CMF 1/8W 5% 43K
R8462	205355	XX11066-310	RES CMF 1/10W 2% 16K
R8463	197907	XX60444-390	RES CMF 1/10W 5% 3.9K
R8464	207835	XX20472-020	RES CMF 1/10W 5% 180K
R8465	197620	XX70434-240	RES CMF 1/10W 5% 11K
R8466	200169	XX20471-990	RES CMF 1/10W 5% 12K
R8468	191389	XX30944-710	RES CONTROL GH SUBKEY
R8469	191389	XX30944-710	RES CONTROL RH SUBKEY
R8470	175352	XX30939-630	RES CF 1/4W 2% 3.3K (SEE NOTE@)
R8470	175047	XX90571-310	RES CF 1/4W 2% 5.6K (SEE NOTE@)
R8471	192097	XX30944-310	RES CMF 1/10W 5% 4.7K
R8472	190465	XX11064-980	RES CMF 1/8W 2% 5.6K
R8473	205333	XX50886-410	RES CMF 1/10W 2% 130R
R8474	205352	XX40438-200	RES CMF 1/10W 2% 12K
R8475	197638	XX30944-150	RES CMF 1/10W 2% 1K
R8476	175353	XX90571-300	RES CF 1/4W 2% 4.3K
R8477	179316	XX11059-940	RES CF 1/4W 2% 6.2K
R8478	179316	XX11059-940	RES CF 1/4W 2% 6.2K
R8479	179316	XX11059-940	RES CF 1/4W 2% 6.2K
R8480	176876	XX50883-110	RES CF 1/4W 2% 2.4K
R8481	194916	XX30944-180	RES CMF 1/10W 2% 6.8K
R8482	205335	XX30944-290	RES CMF 1/10W 5% 160R
R8483	195937	XX50886-610	RES CMF 1/10W 5% 10K
R8485	197619	XX11066-390	RES CMF 1/10W 5% 75R
R8486	201140	XX11066-400	RES CMF 1/10W 5% 240R
R8487	174348	XX30942-990	RES CMF 1/8W 5% 1K
R8488	192100	XX20471-950	RES CMF 1/10W 5% 1K
R8489	192077	XX11066-440	RES CMF 1/10W 5% 3.3K
R8490	194916	XX30944-180	RES CMF 1/10W 2% 6.8K
R8491	197905	XX40438-180	RES CMF 1/10W 2% 2.7K
R8492	195942	XX90574-400	RES CMF 1/10W 5% 470R
R8493	205346	XX80440-400	RES CMF 1/10W 5% 5.6K
R8494	195937	XX50886-610	RES CMF 1/10W 5% 10K
R8495	195937	XX50886-610	RES CMF 1/10W 5% 10K
R8496	197475	XX11066-450	RES CMF 1/10W 5% 4.3K
R8497	194920	XX90574-260	RES CMF 1/10W 2% 1.2K
R8498	175890	XX80437-110	RES CF 1/4W 2% 3.9K
R8499	205341	XX60444-270	RES CMF 1/10W 2% 2K
U8101	150750	1A51136-01A	IC MODULATOR
U8102	150750	1A51136-01A	IC MODULATOR
U8103	150750	1A51136-01A	IC MODULATOR
U8104	150750	1A51136-01A	IC BUFFER
U8105	204290	1A51133-01A	IC D/A CONVERTER
U8107	223806	XX46022-000	IC -5V REG
U8108	226497	XX15054-150	IC +12V REGULATOR
U8109	162394	XX46007-600	IC -12V REGULATOR
U8201	223806	XX46022-000	IC B CONV AMP
U8202	223806	XX46022-000	IC R CONV AMP
U8203	223806	XX46022-000	IC G CONV AMP
	160657	2841531-002	CLIP, TRANSISTOR

CRT DRIVER CBA

	202032	2F30008-501	CIRCUIT COMPLETE CTC169BL,BM,BN,BT,BU,BW,HM,HN,PA,PB,PC,PD,PE,PF,PG,PH,PT,PU,PV,PW,PX
	237595	2F30008-502	CIRCUIT COMPLETE CTC169PJ,PK,PM
C5001	189978	1C30221-22A	CAP LYTC 220UF M 16V
C5001	161285	XX20467-280	CAP LYTC 220UF M 35V
C5002	120696	1C08100-05A	CAPCD 1000PF K Z5P 3KV (SEE NOTE@)
C5002	226300	XX80435-780	CAPCD 3300PF K Z5P 3KV (SEE NOTE@)
C5003	151292	1490001-71A	CAP LYTC 4.7UF M 250V
C5004	195749	2841261-51N	CAPCD .012UF M 250V
C5005	149297	2841255-50R	CAPCD .047UF Z Z5V 50V
CR5001	176296	1476171-031	DIODE
CR5002	139706	1471872-008	DIODE
CR5003	176296	1476171-031	DIODE
CR5004	139706	1471872-008	DIODE
CR5005	159434	99201-226	DIODE
CR5006	176296	1476171-031	DIODE
CR5007	139706	1471872-008	DIODE
J5001	202910	XX10004-990	CONNECTOR 7 PIN
KS5001	204872	1P24001-03A	* SOCKET PIX TUBE 9 PIN (SEE NOTE@)
KS5001	206406	1P24001-05A	* SOCKET PIX TUBE 10 PIN (SEE NOTE@)
L5001	195750	1C51101-12A	COIL 120UH
Q5001	146826	1417362-006	TRANSISTOR VIDEO DRIVER EBC (SEE NOTE@)
Q5001	208434	XX60411-533	TRANSISTOR VIDEO DRIVER BCE (SEE NOTE@)
Q5002	146847	1417306-013	TRANSISTOR SCAN LOSS SW
Q5003	198752	1417321-004	TRANSISTOR SWITCH
R5001	830222	XX11057-940	RES CC 1/2W 10% 2.2K
R5002	176656	2874125-421	RES MFFP 2W 5% 10K
R5003	830222	XX11057-940	RES CC 1/2W 10% 2.2K
R5004	176793	2819435-389	RES CF 1/2W 5% 470R
R5005	175317	2819434-421	RES CF 1/4W 5% 10K
R5006	175351	2819434-428	RES CF 1/4W 5% 20K
R5007	151890	993290-261	RES MF 1/2W 5% 33K
R5008	204873	2819435-179	RES CF 1/2W 10% 2.7M
R5009	175351	2819434-428	RES CF 1/4W 5% 20K

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R5010	177816	2819434-459	RES CF 1/4W 5% 390K
R5011	830222	993153-066	RES CF 1/2W 5% 2.2K (SEE NOTE@)
R5011	183182	993153-078	RES CF 1/2W 5% 22K (SEE NOTE@)
R5012	180469	2819434-427	RES CF 1/4W 5% 18K
R5013	175042	2819434-405	RES CF 1/4W 5% 2.2K
R5014	227933	993153-062	RES CC 1/2W 10% 1K
R5015	829027	2819434-359	RES MFFP 1/4W 2% 27R
R5016	830222	XX11057-940	RES CC 1/2W 10% 2.2K
R5017	175312	2819434-393	RES CF 1/4W 5% 680R
	237610	2G36023-569	CABLE ASY, J3401/J3407
	204875	2G36013-504	CABLE, FOCUS ASSEMBLY
	139301	1479290-001	RETAINER, BEAD CHAIN
	139301	XX15073-540	WIRE TIE, BEAD CHAIN

DIGITAL COMB

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	200451	2F35019-504 ●	CIRCUIT COMPLETE CTC169BL
C6401	174404	2861142-54A	CAPCC 15PF J NPO 50V (SEE NOTE@)
C6401	174407	2861142-84A	CAPCC 27PF J NPO 50V (SEE NOTE@)
C6401	174402	2861142-32A	CAPCC 10PF F NPO 50V (SEE NOTE@)
C6402	197603	1C18300-07A	CAPCC 7PF F NPO 50V (SEE NOTE@)
C6402	197602	1C18300-10A	CAPCC 10PF F NPO 50V (SEE NOTE@)
C6402	194911	1C18400-33A	CAPCC 33PF J NPO 50V (SEE NOTE@)
C6403	174407	2861142-84A	CAPCC 27PF J NPO 50V
C6404	190542	2861143-34A	CAPCC 56PF J NPO 50V
C6405	174410	2861143-44A	CAPCC 68PF J NPO 50V
C6406	190552	2861147-65Z	CAPCC .1UF K X7R 50V (SEE NOTE@)
C6406	195691	1C30279-22A	CAP LYTC 2.2UF M 100V (SEE NOTE@)
C6407	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C6408	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C6409	195911	1C18500-39A	CAPCC 39PF K NPO 50V (SEE NOTE@)
C6409	205547	1C18500-82A	CAPCC 82PF K NPO 50V (SEE NOTE@)
C6409	210689	1C18400-47A	CAPCC 47PF J NPO 50V (SEE NOTE@)
C6410	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C6411	190552	2861147-65Z	CAPCC .1UF K X7R 50V (SEE NOTE@)
C6411	204294	2821714-236	CAP POLY 1UF K 63V (SEE NOTE@)
C6411	200141	2821714-224	CAP POLY .1UF K 63V (SEE NOTE@)
C6412	181091	2861143-84A	CAPCC 150PF J NPO 50V
C6413	192060	1C18562-10A	CAPCC 1000PF K SL 50V
C6414	193340	1C18501-10A	CAPCC 100PF K NPO 50V
C6415	193340	1C18501-10A	CAPCC 100PF K NPO 50V
C6416	193340	1C18501-10A	CAPCC 100PF K NPO 50V
C6417	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C6418	176302	1C30111-10A	CAP LYTC 100UF M 10V (SEE NOTE@)
C6418	190500	1C31121-18A	CAP LYTC 180UF M 16V (SEE NOTE@)
C6419	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C6420	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C6421	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C6422	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C6423	195696	2861146-45Z	CAPCC .012UF K X7R 50V
C6424	174404	2861142-54A	CAPCC 15PF J NPO 50V
C6425	191959	1C30130-47A	CAP LYTC 47UF M 25V (SEE NOTE@)
C6425	193042	1C30231-22A	CAP LYTC 220UF M 25V (SEE NOTE@)
C6426	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C6427	194911	1C18500-33A	CAPCC 33PF K NPO 50V (SEE NOTE@)
C6427	192050	1C18500-27A	CAPCC 27PF K NPO 50V (SEE NOTE@)
C6428	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C6429	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C6430	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C6431	174401	2861141-92A	CAPCC 7PF D NPO 50V
C6432	174406	2861142-74A	CAPCC 22PF J NPO 50V
C6433	174399	2861141-71A	CAPCC 5PF D NPO 50V
C6434	181090	2861143-14A	CAPCC 39PF J NPO 50V (SEE NOTE@)
C6434	174406	2861142-74A	CAPCC 22PF J NPO 50V (SEE NOTE@)
C6435	181090	2861143-14A	CAPCC 39PF J NPO 50V
C6436	190543	2861143-94A	CAPCC 180PF J NPO 50V
C6437	151119	1C30179-33A	CAP LYTC 3.3UF M 100V
C6441	190528	2821725-461	CAP LYTC 3.3UF M 50V
C6442	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C6443	189981	1C30150-10A	CAP LYTC 10UF M 50V
C6444	190543	2861143-94A	CAPCC 180PF J NPO 50V (SEE NOTE@)
C6444	178188	2861144-14A	CAPCC 220PF J NPO 50V (SEE NOTE@)
C6445	174422	2861145-55Z	CAPCC 2700PF K X7R 50V
C6446	201130	2861144-84M	CAPCC 820PF J SL 50V
C6447	201131	2861147-97S	CAPCC .18UF Z Y5V 50V
C6448	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C6449	194911	1C18500-33A	CAPCC 33PF K NPO 50V (SEE NOTE@)
C6449	195924	1C18500-47A	CAPCC 47PF K NPO 50V (SEE NOTE@)
C6450	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C6451	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C6452	160077	1C30178-47A	CAP LYTC .47UF M 100V
C6453	189991	1C30179-10A	CAP LYTC 1UF M 100V
C6454	179277	2861147-25Z	CAPCC .047UF J X7R 50V (SEE NOTE@)
C6454	201163	2861147-45Z	CAPCC .068UF K X7R 50V (SEE NOTE@)
C6455	151119	1C30179-33A	CAP LYTC 3.3UF M 100V
C6456	181228	2861144-15Z	CAPCC 220PF K X7R 50V
C6457	201132	2861145-75Z	CAPCC 3900PF K X7R 50V
C6458	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C6459	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C6461	190520	2821714-228	CAP POLY .22UF K 63V (SEE NOTE@)
C6461	181462	2861148-17S	CAPCC .22UF Z Y5V 50V (SEE NOTE@)
C6462	195691	1C30279-22A	CAP LYTC 2.2UF M 100V
CR6401	129903	99201-204	DIODE ZENER 3.3V .4W
CR6402	164717	1471872-006	DIODE
CR6403	164717	1471872-006	DIODE
CR6404	164717	1471872-006	DIODE
CR6405	164717	1471872-006	DIODE
CR6406	201133	1A40101-01A	DIODE
CR6409	164717	1471872-006	DIODE
CR6411	164717	1471872-006	DIODE
FB6401	181469	2821741-001	BEAD
FB6402	181469	2821741-001	BEAD
J6401	201134	XX10005-010	CONNECTOR 8 PIN SPIP
J6402	201135	XX10004-970	CONNECTOR 5 PIN SPIP
J6403	201136	XX10005-020	CONNECTOR 9 PIN SPIP
J6404	201137	XX10004-980	CONNECTOR 6 PIN CONV
JC603	192065	1B14229-00A	RES CMF 1/10W 10% .05R
JC604	181161	93697-005	RES CMF 1/8W 5% .05R
JC625	181161	93697-005	RES CMF 1/8W 5% .05R
JC628	181161	93697-005	RES CMF 1/8W 5% .05R
JC629	181161	93697-005	RES CMF 1/8W 5% .05R
JC630	181161	93697-005	RES CMF 1/8W 5% .05R
JC637	181161	93697-005	RES CMF 1/8W 5% .05R
JC638	181161	93697-005	RES CMF 1/8W 5% .05R
JC639	181161	93697-005	RES CMF 1/8W 5% .05R
JC643	181161	93697-005	RES CMF 1/8W 5% .05R
JC644	181161	93697-005	RES CMF 1/8W 5% .05R
JC645	181161	93697-005	RES CMF 1/8W 5% .05R
JC648	181161	93697-005	RES CMF 1/8W 5% .05R
JC649	181161	93697-005	RES CMF 1/8W 5% .05R
JC650	181161	93697-005	RES CMF 1/8W 5% .05R
JC652	181161	93697-005	RES CMF 1/8W 5% .05R
JC653	181161	93697-005	RES CMF 1/8W 5% .05R

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
JC654	181161	93697-005	RES CMF 1/8W 5% .05R
JC655	181161	93697-005	RES CMF 1/8W 5% .05R
JC659	181161	93697-005	RES CMF 1/8W 5% .05R
JC661	181161	93697-005	RES CMF 1/8W 5% .05R
JC662	192065	1B14229-00A	RES CMF 1/10W 10% .05R
JC663	181161	93697-005	RES CMF 1/8W 5% .05R
JC664	181161	93697-005	RES CMF 1/8W 5% .05R
JC665	181161	93697-005	RES CMF 1/8W 5% .05R
JC667	181161	93697-005	RES CMF 1/8W 5% .05R
JC696	181161	93697-005	RES CMF 1/8W 5% .05R
JC697	181161	93697-005	RES CMF 1/8W 5% .05R
L6401	193056	2873607-123	COIL 6.8UH (SEE NOTE@)
L6401	175409	2873607-125	COIL 10UH (SEE NOTE@)
L6402	195711	1C51100-18A	COIL 18UH (SEE NOTE@)
L6402	160518	1C51100-10A	COIL 10UH (SEE NOTE@)
L6403	197614	1C51109-47A	COIL 4.7UH (SEE NOTE@)
L6405	195710	1C51100-39A	COIL 39UH
L6406	197613	1C51100-15A	COIL 15UH
L6407	176622	1C51101-47A	COIL
Q6401	179741	1417501-001	TRANSISTOR LUMA BUFFER
Q6402	146847	1417306-013	TRANSISTOR CHROMA AMP
Q6403	179740	1417500-001	TRANSISTOR VIDEO BUFFER
Q6404	179741	1417501-001	TRANSISTOR BUFFER
Q6405	179741	1417501-001	TRANSISTOR BUFFER
Q6406	179740	1417500-001	TRANSISTOR DIFF AMP
Q6407	179740	1417500-001	TRANSISTOR LUMA AMP
Q6408	179740	1417500-001	TRANSISTOR LUMA AMP
Q6409	179740	1417500-001	TRANSISTOR DIFF AMP
Q6410	179740	1417500-001	TRANSISTOR DIFF AMP
Q6411	179740	1417500-001	TRANSISTOR DIFF AMP
Q6412	179740	1417500-001	TRANSISTOR LUMA BUFFER
Q6413	179740	1417500-001	TRANSISTOR INVERTER
Q6414	179740	1417500-001	TRANSISTOR CHROMA BUFF
Q6421	146847	1417306-013	TRANSISTOR CLAMP GEN
Q6422	179741	1417501-001	TRANSISTOR SYNC SEP
Q6423	179741	1417501-001	TRANSISTOR LUMA AMP
Q6424	179741	1417501-001	TRANSISTOR LUMA BUFFER
Q6425	179741	1417501-001	TRANSISTOR BUFFER
Q6426	146847	1417306-013	TRANSISTOR KEYED CLAMP
Q6427	179741	1417501-001	TRANSISTOR BUFFER
Q6428	179741	1417501-001	TRANSISTOR SYNC SLICER
Q6429	179741	1417501-001	TRANSISTOR -Y BUFFER
Q6430	179740	1417500-001	TRANSISTOR LUMA AMP
R6400	192100	1B14212-10A	RES CMF 1/10W 5% 1K (SEE NOTE@)
R6400	174349	93697-407	RES CMF 1/8W 5% 2.7K (SEE NOTE@)
R6401	175055	2819434-397	RES CF 1/4W 5% 1K
R6402	175325	2819434-373	RES CF 1/4W 5% 100R
R6403	175055	2819434-397	RES CF 1/4W 5% 1K
R6404	195942	1B14211-47A	RES CMF 1/10W 5% 470R
R6405	174368	93697-432	RES CMF 1/8W 5% 30K
R6406	204316	1B14215-20A	RES CMF 1/10W 5% 2M
R6407	195934	1B14214-27A	RES CMF 1/10W 5% 270K
R6409	162001	93697-425	RES CMF 1/8W 5% 15K (SEE NOTE@)
R6409	197474	1B14213-15A	RES CMF 1/10W 5% 15K (SEE NOTE@)
R6410	181493	93697-692	RES CMF 1/8W 2% 620R
R6411	181493	93697-692	RES CMF 1/8W 2% 620R (SEE NOTE@)
R6411	181488	93697-385	RES CMF 1/8W 2% 330R (SEE NOTE@)
R6412	178196	93697-399	RES CMF 1/8W 5% 1.2K (SEE NOTE@)
R6412	174347	93697-390	RES CMF 1/8W 5% 510R (SEE NOTE@)
R6414	176631	2819434-400	RES CF 1/4W 5% 1.3K
R6415	192085	1B14212-22A	RES CMF 1/10W 5% 2.2K
R6416	181080	93697-409	RES CMF 1/8W 5% 3.3K
R6417	181488	93697-385	RES CMF 1/8W 2% 330R (SEE NOTE@)
R6417	175743	93697-396	RES CMF 1/8W 5% 910R (SEE NOTE@)
R6418	192085	1B14212-22A	RES CMF 1/10W 5% 2.2K
R6419	175055	2819434-397	RES CF 1/4W 5% 1K
R6420	174345	93697-387	RES CMF 1/8W 5% 390R
R6421	200417	2821761-153	RES CONTROL REF VOLT
R6422	151602	93697-382	RES CMF 1/8W 5% 240R (SEE NOTE@)
R6422	176818	93697-373	RES CMF 1/8W 5% 100R (SEE NOTE@)
R6423	175317	2819434-421	RES CF 1/4W 5% 10K
R6424	175317	2819434-421	RES CF 1/4W 5% 10K
R6425	175055	2819434-397	RES CF 1/4W 5% 1K
R6426	175317	2819434-421	RES CF 1/4W 5% 10K
R6429	190455	93697-449	RES CMF 1/8W 5% 150K
R6430	162003	93697-393	RES CMF 1/8W 5% 680R
R6431	201139	1B14214-51A	RES CMF 1/10W 5% 510K
R6432	201140	1B14211-24A	RES CMF 1/10W 5% 240R
R6433	162001	93697-401	RES CMF 1/8W 5% 1.5K
R6434	174348	93697-397	RES CMF 1/8W 5% 1K
R6435	181488	93697-385	RES CMF 1/8W 2% 330R
R6436	175418	93697-414	RES CMF 1/8W 5% 5.1K
R6437	194915	1B14212-56A	RES CMF 1/10W 5% 5.6K
R6438	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R6439	174365	93697-723	RES CMF 1/8W 2% 12K
R6440	181064	93697-707	RES CMF 1/8W 2% 2.7K
R6441	174355	93697-441	RES CMF 1/8W 5% 68K
R6442	201141	93697-712	RES CMF 1/8W 2% 4.3K
R6443	181483	93697-410	RES CMF 1/8W 5% 3.6K
R6444	190464	93697-708	RES CMF 1/8W 2% 3K
R6445	190465	93697-715	RES CMF 1/8W 2% 5.6K
R6446	181484	93697-703	RES CMF 1/8W 2% 1.8K
R6447	181079	93697-705	RES CMF 1/8W 2% 2.2K
R6448	174350	93697-437	RES CMF 1/8W 5% 47K
R6450	174350	93697-413	RES CMF 1/8W 5% 4.7K (SEE NOTE@)
R6450	192078	1B14212-47A	RES CMF 1/10W 5% 4.7K (SEE NOTE@)
R6451	174349	93697-407	RES CMF 1/8W 5% 2.7K
R6452	176366	93697-405	RES CMF 1/8W 5% 2.2K
R6453	176818	93697-373	RES CMF 1/8W 5% 100R
R6454	155981	93697-425	RES CMF 1/8W 5% 15K
R6460	176366	93697-405	RES CMF 1/8W 5% 2.2K
R6464	181483	93697-410	RES CMF 1/8W 5% 3.6K
R6465	174350	93697-413	RES CMF 1/8W 5% 4.7K
R6467	174362	93697-475	RES CMF 1/8W 5% 1.8M
R6468	192077	1B14212-33A	RES CMF 1/10W 5% 3.3K (SEE NOTE@)
R6468	192100	1B14212-10A	RES CMF 1/10W 5% 1K (SEE NOTE@)
R6469	192077	1B14212-33A	RES CMF 1/10W 5% 3.3K (SEE NOTE@)
R6469	195932	1B14212-39A	RES CMF 1/10W 5% 3.9K (SEE NOTE@)
R6469	197475	1B14212-43A	RES CMF 1/10W 5% 4.3K (SEE NOTE@)
R6470	192078	1B14212-47A	RES CMF 1/10W 5% 4.7K (SEE NOTE@)
R6470	197642	1B14212-30A	RES CMF 1/10W 5% 3K (SEE NOTE@)
R6470	192085	1B14212-22A	RES CMF 1/10W 5% 2.2K (SEE NOTE@)
R6471	201142	93697-740	RES CMF 1/8W 2% 62K
R6472	190459	93697-378	RES CMF 1/8W 5% 160R
R6473	176821	93697-417	RES CMF 1/8W 5% 6.8K
R6474	174348	93697-397	RES CMF 1/8W 5% 1K
R6475	162006	93697-411	RES CMF 1/8W 5% 3.9K
R6476	180329	93697-465	RES CMF 1/8W 5% 680K
R6477	195944	1B14211-18A	RES CMF 1/10W 5% 180R
R6478	162001	93697-401	RES CMF 1/8W 5% 1.5K
R6479	162986	93697-183	RES MF 1/8W 10% 3.9M
R6480	192078	1B14212-47A	RES CMF 1/10W 5% 4.7K
R6481	829010	993272-349 *	RES CFFP 1/4W 5% 10R
R6483	205340	1B14202-13A	RES CMF 1/10W 2% 1.3K (SEE NOTE@)
R6483	197627	1B14201-91A	RES CMF 1/10W 2% 910R (SEE NOTE@)
R6484	174348	93697-397	RES CMF 1/8W 5% 1K
R6485	176365	93697-420	RES CMF 1/8W 5% 9.1K
R6486	181052	93697-408	RES CMF 1/8W 5% 3K
R6487	190462	93697-697	RES CMF 1/8W 2% 1K
R6488	190525	2821716-301	RES CONTROL SYNC LVL
R6489	174348	93697-397	RES CMF 1/8W 5% 1K
R6490	174349	93697-407	RES CMF 1/8W 5% 2.7K
R6491	181064	93697-707	RES CMF 1/8W 2% 2.7K
R6492	155137	93697-391	RES CMF 1/8W 5% 560R
R6493	175418	93697-414	RES CMF 1/8W 5% 5.1K
R6494	201143	1B14212-62A	RES CMF 1/10W 5% 6.2K

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R6495	178285	93697-424	RES CMF 1/8W 5% 13K (SEE NOTE@)
R6495	174365	93697-723	RES CMF 1/8W 2% 12K (SEE NOTE@)
R6496	202586	1B14202-11A	RES CMF 1/10W 2% 1.1K
R6497	197474	1B14213-15A	RES CMF 1/10W 5% 15K
R6499	192098	1B14210-47A	RES CMF 1/10W 5% 47R
R6501	175308	2819434-399	RES POLY 1/4W 2% 1.2K
R6502	181106	2821716-102	RES CONTROL
R6503	192104	1B14211-39A	RES CMF 1/10W 5% 390R
U6401	201145	1A68102-01A	IC DIGITAL COMB
U6402	201146	1A51124-01A	IC BLACK STRETCH
Y6401	197652	2816766-09A	CRYSTAL 14.318180MHZ

D-PIP (PIX-IN-PIX) CBA

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	204806	2F43004-501	● CIRCUIT COMPLETE CTC169PC,PF,PG,PK, PM,PX
C8002	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
C8003	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
C8004	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C8005	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C8006	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C8008	181463	2861142-12A	CAPCC 8PF D NPO 50V
C8009	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C8010	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
C8011	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
C8012	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C8015	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
C8016	250035	2861146-35Z	CAPCC .01UF K X7R 50V
C8017	250035	2861146-35Z	CAPCC .01UF K X7R 50V (SEE NOTE@)
C8017	195689	1C18573-10A	CAPCC .01UF K X7R 50V (SEE NOTE@)
C8018	250035	2861146-35Z	CAPCC .01UF K X7R 50V (SEE NOTE@)
C8018	195689	1C18573-10A	CAPCC .01UF K X7R 50V (SEE NOTE@)
C8019	250035	2861146-35Z	CAPCC .01UF K X7R 50V (SEE NOTE@)
C8019	195689	1C18573-10A	CAPCC .01UF K X7R 50V (SEE NOTE@)
C8019	193340	1C18401-10A	CAPCC 100PF J NPO 50V (SEE NOTE@)
C8021	250035	2861146-35Z	CAPCC .01UF K X7R 50V
C8022	174409	2861143-24A	CAPCC 47PF J NPO 50V (SEE NOTE@)
C8022	190542	2861143-34A	CAPCC 56PF J NPO 50V (SEE NOTE@)
C8024	201132	2861145-75Z	CAPCC 3900PF K X7R 50V
C8025	204274	1C18401-39A	CAPCC 390PF J NPO 50V
C8026	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C8027	250035	2861146-35Z	CAPCC .01UF K X7R 50V
C8028	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C8030	174412	2861143-64A	CAPCC 100PF J NPO 50V
C8031	189981	1C30250-10A	CAP LYTC 10UF M 50V
C8033	161026	1C30250-22A	CAP LYTC 22UF M 50V
C8034	161026	1C30250-22A	CAP LYTC 22UF M 50V
C8035	189981	1C30250-10A	CAP LYTC 10UF M 50V
C8036	174412	2861143-64A	CAPCC 100PF J NPO 50V
C8037	174412	2861143-64A	CAPCC 100PF J NPO 50V
C8038	174412	2861143-64A	CAPCC 100PF J NPO 50V
C8041	178188	2861144-14A	CAPCC 220PF J NPO 50V
C8042	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C8044	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
C8045	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
C8046	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
C8048	202909	1C18572-18A	CAPCC 1800PF K X7R 50V (SEE NOTE@)
C8048	197601	1C18573-22A	CAPCC .022UF K X7R 50V (SEE NOTE@)
C8049	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C8050	181090	2861143-14A	CAPCC 39PF J NPO 50V
CR8001	201133	1A40101-01A	DIODE
CR8002	201133	1A40101-01A	DIODE
CR8003	201133	1A40101-01A	DIODE
CR8004	201133	1A40101-01A	DIODE
FB8001	181469	2821741-001	BEAD
J8001	200160	XX10005-030	CONNECTOR 10 PIN SYNC
J8002	201135	XX10004-970	CONNECTOR 5 PIN VIDEO
J8003	201134	XX10005-010	CONNECTOR 8 PIN CHR/LUM
JC1	181161	93697-005	RES CMF 1/8W 5% .05R
JC2	181161	93697-005	RES CMF 1/8W 5% .05R
JC3	181161	93697-005	RES CMF 1/8W 5% .05R
JC4	192065	1B14229-00A	RES CMF 1/10W 10% .05R
JC5	192065	1B14229-00A	RES CMF 1/10W 10% .05R
JC7	192065	1B14229-00A	RES CMF 1/10W 10% .05R
JC8	181161	93697-005	RES CMF 1/8W 5% .05R
L8001	196125	1C51101-33A	COIL 330UH
L8002	195712	1C51100-22A	COIL 22UH
L8003	195713	1C51100-47A	COIL 47UH
Q8001	179741	1417501-001	TRANSISTOR VID 1 BUFFER
Q8002	179741	1417501-001	TRANSISTOR VIDEO AMP
Q8003	179740	1417500-001	TRANSISTOR VIDEO AMP
Q8005	179741	1417501-001	TRANSISTOR VID 2 BUFFER
Q8006	179740	1417500-001	TRANSISTOR Y- AMP
Q8007	179740	1417500-001	TRANSISTOR C- AMP
Q8008	146847	1417306-013	TRANSISTOR CHROMA BUFF
Q8009	146847	1417306-013	TRANSISTOR LUMA BUFFER
Q8012	179740	1417500-001	TRANSISTOR SWITCH
Q8013	179740	1417500-001	TRANSISTOR LEVEL SHIFT
Q8014	179741	1417501-001	TRANSISTOR SWITCH
Q8015	179740	1417500-001	TRANSISTOR SWITCH
Q8016	179741	1417501-001	TRANSISTOR LUMA BUFFER
Q8017	179740	1417500-001	TRANSISTOR BLK STR DIS
R8001	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R8002	151602	93697-382	RES CMF 1/8W 5% 240R
R8003	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8004	192085	1B14212-22A	RES CMF 1/10W 5% 2.2K
R8005	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8006	205289	93697-481	RES CMF 1/8W 5% 3.3M (SEE NOTE@)
R8006	174363	93697-479	RES CMF 1/8W 5% 2.7M (SEE NOTE@)
R8007	174364	93697-421	RES CMF 1/8W 5% 10K
R8008	182824	93697-702	RES CMF 1/8W 2% 1.6K
R8009	181482	93697-701	RES CMF 1/8W 2% 1.5K
R8010	181075	93697-461	RES CMF 1/8W 5% 470K (SEE NOTE@)
R8010	174353	93697-453	RES CMF 1/8W 5% 220K (SEE NOTE@)
R8013	181074	93697-435	RES CMF 1/8W 5% 39K
R8014	176821	93697-417	RES CMF 1/8W 5% 6.8K
R8015	180369	93697-404	RES CMF 1/8W 5% 2K
R8016	162003	93697-393	RES CMF 1/8W 5% 680R
R8017	176367	93697-365	RES CMF 1/8W 5% 47R
R8018	179379	93697-377	RES CMF 1/8W 5% 150R
R8019	204276	93697-353	RES CMF 1/8W 5% 15R
R8020	176818	93697-373	RES CMF 1/8W 5% 100R
R8021	181488	93697-385	RES CMF 1/8W 2% 330R
R8022	207832	93697-341	RES CMF 1/8W 5% 4.7R
R8023	174361	93697-469	RES CMF 1/8W 5% 1M
R8024	194927	1B14211-10A	RES CMF 1/10W 5% 100R
R8025	192074	1B14213-10A	RES CMF 1/10W 5% 10K
R8026	155137	93697-391	RES CMF 1/8W 5% 560R
R8027	181482	93697-701	RES CMF 1/8W 2% 1.5K
R8028	197625	1B14202-16A	RES CMF 1/10W 2% 1.6K
R8029	176818	93697-373	RES CMF 1/8W 5% 100R
R8030	192104	1B14211-39A	RES CMF 1/10W 5% 390R
R8031	181106	2821716-102	RES CONTROL Y ADJUST
R8032	192074	1B14213-10A	RES CMF 1/10W 5% 10K
R8033	192082	1B14212-15A	RES CMF 1/10W 5% 1.5K
R8034	174346	93697-389	RES CMF 1/8W 5% 470R
R8035	204277	1B14211-20A	RES CMF 1/10W 5% 200R
R8036	176818	93697-373	RES CMF 1/8W 5% 100R
R8037	181112	2821716-501	RES CONTROL C ADJUST
R8038	174364	93697-721	RES CMF 1/8W 2% 10K
R8039	181482	93697-701	RES CMF 1/8W 2% 1.5K
R8040	194926	1B14201-47A	RES CMF 1/10W 2% 470R
R8041	204277	1B14211-20A	RES CMF 1/10W 5% 200R

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R8042	176816	93697-445	RES CMF 1/8W 5% 100K
R8043	176816	93697-445	RES CMF 1/8W 5% 100K
R8045	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8046	193344	1B14213-33A	RES CMF 1/10W 5% 33K
R8047	192074	1B14213-10A	RES CMF 1/10W 5% 10K
R8048	197637	1B14211-68A	RES CMF 1/10W 5% 680R
R8051	176366	93697-405	RES CMF 1/8W 5% 2.2K
R8055	174350	93697-413	RES CMF 1/8W 5% 4.7K
R8059	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8060	204278	1B14225-47A	RES CMF 1/10W 10% 4.7M
R8061	194922	1B14212-82A	RES CMF 1/10W 5% 8.2K
R8062	174364	93697-421	RES CMF 1/8W 5% 10K
R8063	192081	1B14212-27A	RES CMF 1/10W 5% 2.7K
R8064	192074	1B14213-10A	RES CMF 1/10W 5% 10K
R8065	194927	1B14211-10A	RES CMF 1/10W 5% 100R
R8066	197470	1B14213-20A	RES CMF 1/10W 5% 20K
R8067	197470	1B14213-20A	RES CMF 1/10W 5% 20K
R8068	197470	1B14213-20A	RES CMF 1/10W 5% 20K
R8069	205194	93697-676	RES CMF 1/8W 2% 130R
R8070	174348	93697-397	RES CMF 1/8W 5% 1K (SEE NOTE@)
R8070	192100	1B14212-10A	RES CMF 1/10W 5% 1K (SEE NOTE@)
R8071	210480	2874124-359	RES MF 1W 5% 27R (SEE NOTE@)
R8071	831024	2874124-358	RES MFFP 1W 5% 24R (SEE NOTE@)
R8072	180173	2874124-372	* RES MFFP 1W 5% 91R (SEE NOTE@)
R8072	181232	2874124-371	* RES MFFP 1W 5% 82R (SEE NOTE@)
R8072	175362	2874124-370	* RES MFFP 1W 5% 75R (SEE NOTE@)
R8073	175741	93697-349	RES CMF 1/8W 5% 10R
R8080	204278	1B14225-47A	RES CMF 1/10W 10% 4.7M
R8081	204278	1B14225-47A	RES CMF 1/10W 10% 4.7M
R8082	192073	1B14210-10A	RES CMF 1/10W 5% 10R
R8083	197633	1B14213-47A	RES CMF 1/10W 5% 47K
R8084	197633	1B14213-47A	RES CMF 1/10W 5% 47K
R8085	174355	93697-441	RES CMF 1/8W 5% 68K (SEE NOTE@)
R8085	174357	93697-447	RES CMF 1/8W 5% 120K (SEE NOTE@)
R8087	178287	93697-713	RES CMF 1/8W 2% 4.7K
R8088	192074	1B14213-10A	RES CMF 1/10W 5% 10K
R8089	195942	1B14211-47A	RES CMF 1/10W 5% 470R
R8090	175784	2874124-377	RES MFFP 1W 5% 150R
U8001	204279	1A68105-01D	IC DPIP
U8002	204280	1A64103-01A	IC SRAM
U8003	197646	1A68108-01A	IC FAST SWITCH
U8004	204281	1421753-007	IC SV REGULATOR
Y8001	197652	2816766-09A	CRYSTAL 14.318180MHZ

EXTERNAL SPEAKER CBA

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	201626	2F27004-502	● CIRCUIT COMPLETE CTC169BL,BM,BN,HM,HN
	207813	2F26005-505	● CIRCUIT COMPLETE CTC169BT,BU,BW,PB,PC,PE,PF,PG,PJ,PK,PM,PT,PU,PV,PW,PX
	204919	2F26005-501	● CIRCUIT COMPLETE CTC169PD,PH
J1904	201150	XX70308-100	CONNECTOR 4 PIN
R1	196014	2874125-361	RES MFFP 2W 5% 33R
R3	196014	2874125-361	* RES MFFP 2W 5% 33R
R4	175788	2874125-363	* RES MFFP 2W 5% 39R
SW1	211982	XX10848-900	SWITCH
	161073	2862313-001	TERMINAL, SPEAKER

FRONT PANEL ASSEMBLY CBA

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	250109	2F42008-501	● CIRCUIT COMPLETE CTC169BL,BM,BN,HM,HN
	208561	2F42009-502	● CIRCUIT COMPLETE CTC169BT,BU,BW,PB,PT,PU,PV,PW,PX
	218811	2F42015-501	● CIRCUIT COMPLETE CTC169PA,PC,PD
	226114	2F42018-501	● CIRCUIT COMPLETE CTC169PE,PF,PG,PH,PJ,PK,PM
C3401	189991	1C30179-10A	CAP LYTC 1UF M 100V
C3402	151119	1C30179-33A	CAP LYTC 3.3UF M 100V
C3403	250105	2841253-32M	CAPCD 330PF K Z5P 50V
C3404	162642	1C30110-47A	CAP LYTC 47UF M 10V
C3406	143879	2841253-92M	CAPCD 1000PF K Z5P 50V
CR3401	150711	2811592-003	DIODE PHOTO
CR3402	182827	1471898-024	DIODE
CR3403	175393	2861490-008	DIODE LED POWER INDICA
P3001	201160	2G36011-504	CABLE MINI FPA ASY (28"-CLIP) CTC169BL,BM,BN,HM,HN (SEE NOTE@)
P3001	206036	2G36011-618	CABLE MINI FPA ASY (28"-CONNECTOR) CTC169BL,BM,BN,HM,HN (SEE NOTE@)
P3001	218829	2G36011-612	CABLE MINI FPA ASY CTC169BT,BU,BW,PB,PC,PT,PU,PV,PW,PX
Q3401	146847	1417306-013	TRANSISTOR IR AMP
R3401	200186	XX30939-360	RES CF 1/4W 5% 10R
R3402	195752	990401-513	RES CF 1/4W 1% 133K
R3403	175044	2819434-445	RES CF 1/4W 5% 100K
R3404	175040	2819434-365	RES CF 1/4W 5% 47R
R3405	175054	2819434-429	RES CF 1/4W 5% 22K
R3406	176631	2819434-400	RES CF 1/4W 5% 1.3K
R3424	175753	2819434-349	RES CF 1/4W 5% 10R
SW3401	207842	1B64121-08A	SWITCH AUDIO OR -
SW3403	207842	1B64121-08A	SWITCH CHAN UP
SW3411	207842	1B64121-08A	SWITCH VIDEO OR +
SW3413	207842	1B64121-08A	SWITCH VOL DN
SW3421	207842	1B64121-08A	SWITCH SETUP
SW3423	207842	1B64121-08A	SWITCH VOL UP
SW3431	207842	1B64121-08A	SWITCH CHAN DN
SW3433	207842	1B64121-08A	SWITCH POWER CTC169BL,BM,BN,HM,HN
SW3433	205258	1B64141-01A	SWITCH POWER CTC169BT,BU,BW,PA,PB,PC,PD,PE,PF,PG,PH,PJ,PK,PM,PT,PU,PV,PW,PX
U3401	195885	1A51112-01A	IC PREAMP
	202903	6R04024-01B	* BRACKET, LED CTC169BL,BM,BN,HM,HN
	205263	6R04024-02B	* BRACKET, LED CTC169BT,BU,BW,PB,PT,PU,PV,PW,PX
	139301	1479290-001	RETAINER, BEAD CHAIN

HV REGULATOR CBA

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	202042	2F47001-501	● CIRCUIT COMPLETE CTC169BL,BM,BN,BT,BU,BW,HM,HN,PA,PB,PC,PD,PE,PF,PG,PH,PT,PU,PV,PW,PX

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
C4751	189991	1C30179-10A	CAP LYTC 1UF M 100V
C4752	181099	2821714-330	CAP POLY .33UF J 50V
C4753	190520	2821714-228	CAP POLY .22UF K 63V
C4754	201147	2821714-222	CAP POLY .068UF K 63V
C4755	201148	2821714-736	CAP POLY 1UF M 250V
C4756	201149	1C20100-73A	* CAP POLY .018UF E 1.6KV
C4757	147971	2841255-32M	CAPCD .01UF K Z5P 50V
C4758	208565	XX60430-631	* CAP POLY .082UF K 400V (SEE NOTE@)
C4758	146158	2821714-821	* CAP POLY .056UF K 250V (SEE NOTE@)
C4759	190519	2821714-220	CAP POLY.047UF K 63V
C4760	225703	XX30935-630	CAP POLY .01UF J 100V
CR4751	132616	99201-212	DIODE ZENER 6.8V .4W
CR4752	164717	1471872-006	DIODE
FB4751	154042	2843117-005	BEAD FERRITE (SEE NOTE@)
FB4751	152103	2843117-002	BEAD FERRITE (SEE NOTE@)
J4701	201150	XX70308-100	CONNECTOR 4 PIN SPLIT
L4791	175411	2873607-141	COIL 220UH
Q4751	146847	1417306-013	TRANSISTOR DRIVER
Q4752	201152	XX10905-500	TRANSISTOR BOOST SW
Q4753	153677	1417321-003	TRANSISTOR INVERTER
Q4754	201153	XX60346-700	TRANSISTOR B+ MOD
Q4755	201154	XX80344-300	TRANSISTOR B+ MOD
R4751	175055	2819434-397	RES CF 1/4W 5% 1K
R4752	175055	2819434-397	RES CF 1/4W 5% 1K
R4753	175415	2819434-430	RES CF 1/4W 5% 24K
R4754	175044	2819434-445	RES CF 1/4W 5% 100K
R4755	175417	2819434-414	RES CF 1/4W 5% 5.1K
R4756	176876	2819434-406	RES CF 1/4W 5% 2.4K
R4757	829124	993272-382	* RES CFFP 1/4W 5% 240R
R4758	176876	2819434-406	RES CF 1/4W 5% 2.4K
R4759	175417	2819434-414	RES CF 1/4W 5% 5.1K
R4760	201155	993291-345	RES MF 1/2W 5% 6.8R
R4761	175317	2819434-421	RES CF 1/4W 5% 10K
R4762	831143	2874124-388	* RES MFFP 1W 5% 430R
R4763	201156	2874125-422	* RES MF 2W 5% 11K
R4764	179754	990401-369	RES MF 1/4W 1% 5.1K
R4765	179754	990401-369	RES MF 1/4W 1% 5.1K
R4766	191389	2821716-203	RES CONTROL HV ADJ
R4767	205066	1B08230-75A	* RES WW 2W 10% 75R
R4768	193569	990401-201	RES MF 1/4W 1% 100R
T4751	201157	1C61105-01C	* TRANSFORMER HV REG
U4751	201158	1A51142-01A	IC COMPARATOR
	160657	2841531-002	CLIP, TRANSISTOR

HV SPLITTER CBA

	203054	2F25001-501	CIRCUIT COMPLETE CTC169BL,BM,BN,BT, BU,BW,HM,HN,PA,PB, PC,PD,PE,PF,PG,PH, PT,PU,PV,PW,PX
C4701	204313	2841259-90M	CAPCD 820PF Z Z5P 250V
CR4701	164717	1471872-006	DIODE
J4702	250034	XX10004-960	CONNECTOR 4 PIN HV REG
Q4701	146851	1417321-004	TRANSISTOR BUFFER
Q4702	146851	1417321-004	TRANSISTOR BUFFER
R4701	204314	990401-569	RES MF 1/4W 1% 511K
R4702	156850	990401-501	RES MF 1/4W 1% 100K
R4703	175317	2819434-421	RES CF 1/4W 5% 10K
R4704	179955	2819434-435	RES CF 1/4W 5% 39K
R4705	204315	2819435-414	RES CF 1/2W 5% 5.1K

PINCUSHION CBA

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	226093	2F40011-501	CIRCUIT COMPLETE CTC169PE,PF,PG,PH, PJ,PK,PM
C4850	152080	1C30161-10A	CAP LYTC 100UF M 63V
C4851	220149	2821714-404	CAP POLY 2200PF M 100V
C4852	155090	XX70428-520	CAPCD .01UF K Z5P 50V
C4853	190529	2821725-561	CAP LYTC 4.7UF M 50V
C4854	214016	2821714-212	CAP POLY .01UF K 63V (SEE NOTE@)
C4854	214073	XX70427-750	CAP POLY .01UF K 100V (SEE NOTE@)
CR4850	158688	99201-222	DIODE ZENER 18V .4W
CR4851	164717	1471872-006	DIODE
Q4850	201154	XX80344-300	TRANSISTOR BUFFER
Q4851	219025	XX15043-350	TRANSISTOR AMP
R4802	228288	XX15075-340	RES CONTROL PIN (SEE NOTE@)
R4802	181108	XX20472-190	RES CONTROL PIN (SEE NOTE@)
R4803	228288	XX15075-340	RES CONTROL WIDTH (SEE NOTE@)
R4803	181108	XX20472-190	RES CONTROL WIDTH (SEE NOTE@)
R4805	228289	XX15075-350	RES CONTROL TRAP (SEE NOTE@)
R4805	190526	XX30944-750	RES CONTROL TRAP (SEE NOTE@)
R4850	179317	XX30939-460	RES CF 1/4W 5% 750R
R4851	175044	XX30939-510	RES CF 1/4W 5% 100K
R4852	175351	XX40435-660	RES CF 1/4W 5% 20K
R4853	193886	XX20469-510	RES CF 1/4W 5% 43K
R4854	175317	XX30939-480	RES CF 1/4W 5% 10K
R4855	829110	XX30943-330	* RES CF 1/4W 5% 100R
R4856	175351	XX40435-660	RES CF 1/4W 5% 20K
R4857	175042	XX20469-460	RES CF 1/4W 5% 2.2K
R4858	829110	XX30943-330	* RES CF 1/4W 5% 100R
R4859	176457	XX11059-780	RES CF 1/4W 5% 1M
R4860	829310	XX50883-740	RES MF 1/4W 1% 10K
R4861	829310	XX50883-740	RES MF 1/4W 1% 10K
R4862	829110	XX30943-330	* RES CF 1/4W 5% 100R (SEE NOTE@)
R4862	175055	XX11059-640	* RES CF 1/4W 5% 1K (SEE NOTE@)
R4863	180469	XX11059-690	RES CF 1/4W 5% 18K
R4864	175042	XX20469-460	RES CF 1/4W 5% 2.2K
R4865	175044	XX30939-510	RES CF 1/4W 5% 100K
U4850	226459	1A51143-01A	IC E/W CORRECTION
U4851	201158	1A51142-01A	IC DIFFERENTIAL AMP
	160657	2841531-002	CLIP, Q4850

PIP ADAPTER

	200211	2F25002-501	● CIRCUIT COMPLETE CTC169BM,HM
	206403	2F25002-502	● CIRCUIT COMPLETE CTC169BN,HN
C6401	189991	1C30179-10A	CAP LYTC 1UF M 100V
C6402	174409	2861143-24A	CAPCC 47PF J NPO 50V
C6404	146256	2821726-141	CAP LYTC 10UF M 25V
J6401	201134	XX50757-900	CONNECTOR 8 PIN SPIP
J6402	201135	XX10817-700	CONNECTOR 5 PIN SPIP
J6403	201136	XX50758-000	CONNECTOR 9 PIN SPIP
J6404	201137	XX10817-800	CONNECTOR 6 PIN CONV

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
JC612	181161	93697-005	RES CMF 1/8W 5% .05R
L6401	149167	1C51100-68A	COIL 68UH (SEE NOTE@)
L6401	195713	1C51100-47A	COIL 47UH (SEE NOTE@)
Q6401	179740	1417500-001	TRANSISTOR S-LUMA AMP
Q6402	179740	1417500-001	TRANSISTOR S-LUMA SW
Q6403	179741	1417501-001	TRANSISTOR S-LUMA SW
Q6404	179740	1417500-001	TRANSISTOR S-LUMA SW
Q6405	179740	1417500-001	TRANSISTOR CHROMA BUFF
R6401	181482	93697-701	RES CMF 1/8W 2% 1.5K
R6402	181079	93697-705	RES CMF 1/8W 2% 2.2K
R6403	193061	93697-731	RES CMF 1/8W 2% 27K
R6404	174364	93697-721	RES CMF 1/8W 2% 10K
R6405	162003	93697-393	RES CMF 1/8W 5% 680R
R6406	174367	93697-429	RES CMF 1/8W 5% 22K
R6407	178287	93697-713	RES CMF 1/8W 2% 4.7K
R6408	178285	93697-724	RES CMF 1/8W 2% 13K
R6409	174364	93697-421	RES CMF 1/8W 5% 10K
R6410	162006	93697-411	RES CMF 1/8W 5% 3.9K
R6411	181080	93697-409	RES CMF 1/8W 5% 3.3K
R6412	162001	93697-401	RES CMF 1/8W 5% 1.5K
R6414	176631	2819434-400	RES CF 1/4W 5% 1.3K
R6416	175317	2819434-421	RES CF 1/4W 5% 10K
R6443	175319	2819434-410	RES CF 1/4W 5% 3.6K
R6444	174348	93697-397	RES CMF 1/8W 5% 1K

PREAMP CBA

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	208562	2F34003-501	CIRCUIT COMPLETE CTC169BT,BU,BW,PA, PB,PC,PD,PT,PU,PV, PW,PX
	226115	2F34006-501	CIRCUIT COMPLETE CTC169PE,PF,PG, PH,PJ,PK,PM
C3401	143884	XX40433-630	CAPCD .01UF Z Z5V 50V
C3402	193043	XX80434-350	CAP LYTC 47UF M 25V
C3404	162642	1C30110-47A	CAP LYTC 47UF M 10V
C3406	143879	2841253-92M	CAPCD 1000PF K Z5P 50V
CR3402	182827	1471898-024	DIODE ZENER 4.9V .4W
IR3401	198606	XX10535-500	IC IR PREAMP (MARKED SHARP GP1U527G) (SEE NOTE@)
IR3401	229217	XX15071-210	IC IR PREAMP (MARKED SHARP GP1U78QG) (SEE NOTE@)
J3401	201136	XX10005-020	CONNECTOR 9 PIN FPA CTC169BT,BU,BW,PA, PB,PC,PD,PT,PU,PV, PW,PX
J3401	250034	XX10004-960	CONNECTOR 4 PIN CTC169PE,PF,PG, PH,PJ,PK,PM
J3402	203766	XX10004-950	CONNECTOR 3 PIN
J3403	203766	XX10004-950	CONNECTOR 3 PIN
J3404	200160	XX10005-030	CONNECTOR 10 PIN INTERCONNECT CTC169BT,BU,BW,PA, PB,PC,PD,PT,PU,PV, PW,PX
J3404	250034	XX10004-960	CONNECTOR 4 PIN CTC169PE,PF,PG, PH,PJ,PK,PM
J3407	223696	XX80448-070	CONNECTOR 9 PIN
J3408	220145	XX80448-080	CONNECTOR 10 PIN
Q3401	146847	1417306-013	TRANSISTOR INVERTER CTC169BT,BU,BW,PA, PB,PC,PD,PT,PU,PV, PW,PX
Q3401	223704	XX50888-770	TRANSISTOR INVERTER CTC169PE,PF,PG, PH,PJ,PK,PM
R3401	176631	XX11059-650	RES CF 1/4W 5% 1.3K
R3402	175040	XX70430-510	RES CF 1/4W 5% 47R
R3403	175044	2819434-445	RES CF 1/4W 5% 100K
R3404	175040	2819434-365	RES CF 1/4W 5% 47R CTC169BT,BU,BW,PA, PB,PC,PD,PT,PU,PV, PW,PX
R3404	175054	XX60441-580	RES CF 1/4W 5% 22K CTC169PE,PF,PG, PH,PJ,PK,PM
R3405	175054	2819434-429	RES CF 1/4W 5% 22K
R3406	176631	2819434-400	RES CF 1/4W 5% 1.3K

PTV ADAPTER CBA

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	226116	2F25011-501	CIRCUIT COMPLETE CTC169PE,PF,PG,PH, PJ,PK,PM
C6101	226457	1C20100-18A	* CAP POLY 2700PF E 1.6KV
C6102	161204	973991-259	CAP POLY 4700PF K 600V
C6103	220998	XX60438-930	CAP LYTC 1UF M 100V
C6104	143879	XX80434-800	CAPCD 1000PF K Z5P 50V
C6105	200141	XX20467-040	CAP POLY .1UF K 63V
C6106	143879	XX80434-800	CAPCD 1000PF K Z5P 50V
C6107	204294	XX90568-280	CAP POLY 1UF K 63V
C6108	214698	XX11054-950	CAP LYTC 10UF M 63V
C6109	193043	XX80434-350	CAP LYTC 47UF M 25V
C6110	226454	XX15054-650	* CAP POLY .9UF 250V
C6111	146158	XX20467-200	CAP POLY .056UF K 250V
C6112	146158	XX20467-200	CAP POLY .056UF K 250V
C6113	190538	XX11057-250	CAPCD 680PF M Z5P 1KV
C6114	190538	XX11057-250	CAPCD 680PF M Z5P 1KV
CR6100	140971	XX70436-530	DIODE
CR6101	196062	2820500-001	DIODE
CR6102	196062	2820500-001	DIODE
CR6103	164717	XX70436-540	DIODE
CR6104	226456	XX80444-160	DIODE ZENER 10V .5W
CR6105	176296	XX30946-670	DIODE
CR6106	176296	XX30946-670	DIODE
FB6100	223785	XX30953-500	BEAD
J6102	204297	XX90446-900	CONNECTOR 6 PIN BLU DEFL YOKE (NO LOCKING)(SEE NOTE@)
J6102	231859	XX15115-220	CONNECTOR 6 PIN BLU DEFL YOKE (LOCKING) (SEE NOTE@)
J6103	204297	XX90446-900	CONNECTOR 6 PIN GRN DEFL YOKE (NO LOCKING)(SEE NOTE@)
J6103	231859	XX15115-220	CONNECTOR 6 PIN GRN DEFL YOKE (LOCKING) (SEE NOTE@)
J6104	204297	XX90446-900	CONNECTOR 6 PIN RED DEFL YOKE (NO LOCKING)(SEE NOTE@)
J6104	231859	XX15115-220	CONNECTOR 6 PIN RED DEFL YOKE (LOCKING) (SEE NOTE@)
J6105	204298	1466404-322	* CONNECTOR 8 PIN DEFL
J6106	202910	XX10004-990	* CONNECTOR 7 PIN BLU KINE DRIVE
J6107	202910	XX10004-990	* CONNECTOR 7 PIN GRN KINE DRIVE
J6108	202910	XX10004-990	* CONNECTOR 7 PIN RED KINE DRIVE
J6109	219160	XX60430-776	CONNECTOR 5 PIN CONV
J6110	204299	XX70308-300	CONNECTOR 4 PIN BLU CONV YOKE
J6111	204299	XX70308-300	CONNECTOR 4 PIN GRN CONV YOKE
J6112	204299	XX70308-300	CONNECTOR 4 PIN RED CONV YOKE
J6113A/B	226469	XX15062-070	* CONNECTOR 6 PIN CONV INTERCONNECT

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
L6101	226458	XX15046-27A	COIL 17.5MH
Q6100	226453	XX15053-290	TRANSISTOR AMP
Q6102	151974	1417303-005	TRANSISTOR H SCAN DET
Q6103	143797	1417318-006	TRANSISTOR DETECT SW
Q6104	143797	1417318-006	TRANSISTOR SCAN LOSS SW
R6101	176654	XX30940-850	* RES MF 1W 5% 33K
R6102	175328	XX50883-040	RES CF 1/4W 5% 240K
R6103	175356	XX50883-270	RES CF 1/2W 5% 220K
R6104	829247	XX20471-570	* RES CF 1/4W 5% 4.7K
R6105	829182	XX80439-900	* RES CF 1/4W 5% 820R
R6106	829143	XX50885-880	* RES CF 1/4W 5% 430R
R6108	175328	XX50883-040	RES CF 1/4W 5% 240K
R6109	175353	XX20469-480	RES CF 1/4W 5% 4.3K
R6110	179318	XX20469-470	RES CF 1/4W 5% 3K
R6111	829110	XX30943-330	RES CF 1/4W 5% 100R
R6112	176668	XX70430-630	RES CF 1/4W 5% 470K
R6113	175360	XX50883-010	RES CF 1/4W 5% 15K
R6114	175041	XX90571-120	RES CF 1/4W 5% 12K
R6115	179318	XX20469-470	RES CF 1/4W 5% 3K
R6116	175360	XX50883-010	RES CF 1/4W 5% 15K
R6117	175314	XX30939-490	RES CF 1/4W 5% 33K
R6118	175360	XX50883-010	RES CF 1/4W 5% 15K
R6119	223357	XX90576-670	RES MF 2W 5% 39K
R6120	829122	XX90573-770	RES CF 1/4W 5% 220R
R6121	226455	XX70432-320	RES WW 3W 10% 30R
R6122	214124	XX50854-305	RES CONTROL
SW6100	211982	XX10848-900	SWITCH SLIDE
T6100	210878	XX40452-73A	* TRANSFORMER DRIVER
U6100	223682	XX46042-200	IC COMPARATOR

PTV AMP CBA

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	226117	2F27039-501	● CIRCUIT COMPLETE CTC169PE,PF,PG, PH,PJ,PK,PM (SEE NOTE@)
	236173	2F27039-503	● CIRCUIT COMPLETE CTC169PG (SEE NOTE@)
C7001	226460	XX11053-680	CAPCC 120PF J SL 50V
C7002	204294	XX90568-280	CAP POLY 1UF K 63V
C7003	174421	XX70427-480	CAPCC 2200PF K X7R 50V
C7005	174421	XX70427-480	CAPCC 2200PF K X7R 50V
C7006	207865	XX11054-690	CAP LYTC 330UF M 25V
C7007	214698	XX11054-950	CAP LYTC 10UF M 63V
C7008	214698	XX11054-950	CAP LYTC 10UF M 63V
C7009	214698	XX11054-950	CAP LYTC 10UF M 63V
C7010	214698	XX11054-950	CAP LYTC 10UF M 63V
C7011	226460	XX11053-680	CAPCC 120PF J SL 50V
C7012	207865	XX11054-690	CAP LYTC 330UF M 25V
C7013	204294	XX90568-280	CAP POLY 1UF K 63V
C7015	214698	XX11054-950	CAP LYTC 10UF M 63V
C7016	214698	XX11054-950	CAP LYTC 10UF M 63V
C7017	226461	XX11055-510	CAPCD 820PF K Y5P 50V
C7018	226461	XX11055-510	CAPCD 820PF K Y5P 50V
C7021	226460	XX11053-680	CAPCC 120PF J SL 50V
C7022	204294	XX90568-280	CAP POLY 1UF K 63V
C7023	214698	XX11054-950	CAP LYTC 10UF M 63V
C7026	207865	XX11054-690	CAP LYTC 330UF M 25V
C7027	214698	XX11054-950	CAP LYTC 10UF M 63V
C7030	214698	XX11054-950	CAP LYTC 10UF M 63V
C7031	226460	XX11053-680	CAPCC 120PF J SL 50V
C7032	214698	XX11054-950	CAP LYTC 10UF M 63V
C7033	204294	XX90568-280	CAP POLY 1UF K 63V
C7035	214698	XX11054-950	CAP LYTC 10UF M 63V
C7036	207865	XX11054-690	CAP LYTC 330UF M 25V
C7037	214698	XX11054-950	CAP LYTC 10UF M 63V
C7039	207865	XX11054-690	CAP LYTC 330UF M 25V
C7040	214698	XX11054-950	CAP LYTC 10UF M 63V
C7041	226460	XX11053-680	CAPCC 120PF J SL 50V
C7042	204294	XX90568-280	CAP POLY 1UF K 63V
C7043	214698	XX11054-950	CAP LYTC 10UF M 63V
C7045	214698	XX11054-950	CAP LYTC 10UF M 63V
C7046	207865	XX11054-690	CAP LYTC 330UF M 25V
C7047	214698	XX11054-950	CAP LYTC 10UF M 63V
C7048	214698	XX11054-950	CAP LYTC 10UF M 63V
C7049	214698	XX11054-950	CAP LYTC 10UF M 63V
C7050	214698	XX11054-950	CAP LYTC 10UF M 63V
C7051	226460	XX11053-680	CAPCC 120PF J SL 50V
C7052	214698	XX11054-950	CAP LYTC 10UF M 63V
C7053	204294	XX90568-280	CAP POLY 1UF K 63V
C7055	214698	XX11054-950	CAP LYTC 10UF M 63V
C7056	207865	XX11054-690	CAP LYTC 330UF M 25V
C7057	214698	XX11054-950	CAP LYTC 10UF M 63V
C7059	207865	XX11054-690	CAP LYTC 330UF M 25V
C7060	214698	XX11054-950	CAP LYTC 10UF M 63V
C7061	174421	XX70427-480	CAPCC 2200PF K X7R 50V
C7062	174421	XX70427-480	CAPCC 2200PF K X7R 50V
C7063	174421	XX70427-480	CAPCC 2200PF K X7R 50V
C7064	226461	XX11055-510	CAPCD 820PF K Y5P 50V
C7065	226461	XX11055-510	CAPCD 820PF K Y5P 50V
C7066	226461	XX11055-510	CAPCD 820PF K Y5P 50V
C7105	207865	XX11054-690	CAP LYTC 330UF M 25V
C7106	207865	XX11054-690	CAP LYTC 330UF M 25V
C7107	207865	XX11054-690	CAP LYTC 330UF M 25V
C7111	174421	XX70427-480	CAPCC 2200PF K X7R 50V
C7112	226461	XX11055-510	CAPCD 820PF K Y5P 50V
C7113	174421	XX70427-480	CAPCC 2200PF K X7R 50V
C7114	190544	XX80433-840	CAPCC 220PF J SL 50V
C7115	174421	XX70427-480	CAPCC 2200PF K X7R 50V
C7116	226461	XX11055-510	CAPCD 820PF K Y5P 50V
C7117	174421	XX70427-480	CAPCC 2200PF K X7R 50V
C7118	174421	XX70427-480	CAPCC 2200PF K X7R 50V
C7119	226461	XX11055-510	CAPCD 820PF K Y5P 50V
C7120	226461	XX11055-510	CAPCD 820PF K Y5P 50V
C7121	226461	XX11055-510	CAPCD 820PF K Y5P 50V
C7122	226461	XX11055-510	CAPCD 820PF K Y5P 50V
C7140	226462	XX40432-760	CAPCC 1200PF K X7R 50V
C7141	226462	XX40432-760	CAPCC 1200PF K X7R 50V
C7142	226462	XX40432-760	CAPCC 1200PF K X7R 50V
C7143	226462	XX40432-760	CAPCC 1200PF K X7R 50V
C7144	226462	XX40432-760	CAPCC 1200PF K X7R 50V
C7145	226462	XX40432-760	CAPCC 1200PF K X7R 50V
C7150	228008	XX80434-970	CAPCC 22PF J NPO 250V (SEE NOTE@)
C7150	145731	XX60440-160	CAPCD 560PF K Z5P 250V (SEE NOTE@)
C7151	228008	XX80434-970	CAPCC 22PF J NPO 250V (SEE NOTE@)
C7151	145731	XX60440-160	CAPCD 560PF K Z5P 250V (SEE NOTE@)
C7152	228008	XX80434-970	CAPCC 22PF J NPO 250V (SEE NOTE@)
C7152	150733	XX50881-430	CAPCD 1000PF M Z5P 250V CTC169PE,PF,PG,PH (SEE NOTE@)
C7152	145731	XX60440-160	CAPCD 560PF K Z5P 250V CTC169PG (SEE NOTE@)
C7153	228008	XX80434-970	CAPCC 22PF J NPO 250V (SEE NOTE@)
C7153	145253	XX60439-940	CAPCD 120PF K Z5P 250V (SEE NOTE@)
C7154	145253	XX60439-940	CAPCD 120PF K Z5P 250V
C7155	145253	XX60439-940	CAPCD 120PF K Z5P 250V
C7156	214698	XX11054-950	CAP LYTC 10UF M 63V
C7157	207865	XX11054-690	CAP LYTC 330UF M 25V
C7158	174421	XX70427-480	CAPCC 2200PF K X7R 50V
C7159	226461	XX11055-510	CAPCD 820PF K Y5P 50V
C7160	174409	XX20466-810	CAPCC 47PF J NPO 50V
C7161	174409	XX20466-810	CAPCC 47PF J NPO 50V
C7162	174409	XX20466-810	CAPCC 47PF J NPO 50V
C7163	174409	XX20466-810	CAPCC 47PF J NPO 50V
C7164	174409	XX20466-810	CAPCC 47PF J NPO 50V
C7165	174409	XX20466-810	CAPCC 47PF J NPO 50V
CR7001	164874	XX30946-680	DIODE
CR7002	164874	XX30946-680	DIODE
CR7003	164874	XX30946-680	DIODE
CR7004	164874	XX30946-680	DIODE
CR7005	164874	XX30946-680	DIODE
CR7006	223338	XX15047-700	DIODE
CR7007	223338	XX15047-700	DIODE
CR7008	223338	XX15047-700	DIODE
CR7009	223338	XX15047-700	DIODE

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
CR7010	164874	XX30946-680	DIODE
CR7011	164874	XX30946-680	DIODE
CR7012	164874	XX30946-680	DIODE
CR7013	164874	XX30946-680	DIODE
CR7014	164874	XX30946-680	DIODE
CR7015	129938	99201-111	DIODE ZENER 6.2V .4W
CR7016	129938	99201-111	DIODE ZENER 6.2V .4W
CR7019	164874	XX30946-680	DIODE
CR7020	164874	XX30946-680	DIODE
CR7021	164874	XX30946-680	DIODE
CR7022	223338	XX15047-700	DIODE
CR7023	223338	XX15047-700	DIODE
CR7024	129938	99201-111	DIODE ZENER 6.2V .4W
CR7025	164874	XX30946-680	DIODE
CR7026	164874	XX30946-680	DIODE
CR7028	164874	XX30946-680	DIODE
CR7029	164874	XX30946-680	DIODE
CR7030	164874	XX30946-680	DIODE
CR7031	223338	XX15047-700	DIODE
CR7032	223338	XX15047-700	DIODE
CR7033	129938	99201-111	DIODE ZENER 6.2V .4W
CR7034	223338	XX15047-700	DIODE
CR7035	223338	XX15047-700	DIODE
CR7036	129938	99201-111	DIODE ZENER 6.2V .4W
CR7037	164874	XX30946-680	DIODE
CR7038	164874	XX30946-680	DIODE
CR7039	164874	XX30946-680	DIODE
CR7040	223338	XX15047-700	DIODE
CR7041	223338	XX15047-700	DIODE
CR7042	129938	99201-111	DIODE ZENER 6.2V .4W
CR7046	164874	XX30946-680	DIODE
CR7047	164874	XX30946-680	DIODE
CR7048	164874	XX30946-680	DIODE
CR7049	223338	XX15047-700	DIODE
CR7050	223338	XX15047-700	DIODE
CR7051	129938	99201-111	DIODE ZENER 6.2V .4W
CR7052	223338	XX15047-700	DIODE
CR7053	223338	XX15047-700	DIODE
CR7054	129938	99201-111	DIODE ZENER 6.2V .4W
CR7065	164874	XX30946-680	DIODE
CR7066	164874	XX30946-680	DIODE
CR7067	164874	XX30946-680	DIODE
CR7068	164874	XX30946-680	DIODE
CR7069	164874	XX30946-680	DIODE
CR7070	164874	XX30946-680	DIODE
CR7071	129938	99201-111	DIODE ZENER 6.2V .4W
CR7072	223338	XX15047-700	DIODE
CR7073	223338	XX15047-700	DIODE
CR7074	129938	99201-111	DIODE ZENER 6.2V .4W
CR7075	129938	99201-111	DIODE ZENER 6.2V .4W
CR7076	129938	99201-111	DIODE ZENER 6.2V .4W
CR7077	223338	XX15047-700	DIODE
CR7078	223338	XX15047-700	DIODE
CR7079	223338	XX15047-700	DIODE
CR7080	223338	XX15047-700	DIODE
CR7081	223338	XX15047-700	DIODE
CR7082	223338	XX15047-700	DIODE
FB7001	154042	2843117-005	BEAD
FB7002	154042	2843117-005	BEAD
FB7003	154042	2843117-005	BEAD
FB7004	154042	2843117-005	BEAD
FB7005	154042	2843117-005	BEAD
FB7006	154042	2843117-005	BEAD
FB7007	154042	2843117-005	BEAD
FB7008	154042	2843117-005	BEAD
FB7009	154042	2843117-005	BEAD
FB7010	154042	2843117-005	BEAD
FB7011	154042	2843117-005	BEAD
FB7012	154042	2843117-005	BEAD
FB7013	154042	2843117-005	BEAD
FB7014	154042	2843117-005	BEAD
FB7015	154042	2843117-005	BEAD
FB7016	154042	2843117-005	BEAD
FB7017	154042	2843117-005	BEAD
FB7018	154042	2843117-005	BEAD
FB7019	154042	2843117-005	BEAD
FB7020	154042	2843117-005	BEAD
FB7021	154042	2843117-005	BEAD
FB7022	154042	2843117-005	BEAD
FB7023	154042	2843117-005	BEAD
FB7024	154042	2843117-005	BEAD
FB7025	154042	2843117-005	BEAD
FB7026	154042	2843117-005	BEAD
FB7027	154042	2843117-005	BEAD
FB7028	154042	2843117-005	BEAD
FB7029	154042	2843117-005	BEAD
FB7030	154042	2843117-005	BEAD
J7017A/B	226469	XX15062-070	CONNECTOR 6 PIN CONV YOKE
J7019	218375	XX20459-464	CONNECTOR 7 PIN CONV PANEL
J7020	226470	XX15055-510	CONNECTOR 6 PIN POWER
JC701	181161	XX50885-530	RES CMF 1/8W 5% .0R
Q7001	190482	1A01101-01A	TRANSISTOR H AMP
Q7002	204303	1A02105-01A	TRANSISTOR H AMP
Q7004	204300	XX10599-300	TRANSISTOR H TOP OUTPUT
Q7005	204301	XX10599-200	TRANSISTOR GRN H BOTTOM OUTPUT
Q7007	190482	1A01101-01A	TRANSISTOR GRN V AMP
Q7008	204303	1A02105-01A	TRANSISTOR GRN V AMP
Q7009	214642	XX60410-980	TRANSISTOR GRN V TOP RETRACE BOOST
Q7010	204300	XX10599-300	TRANSISTOR GRN V TOP OUTPUT
Q7011	204301	XX10599-200	TRANSISTOR GRN V BOTTOM OUTPUT
Q7012	214638	XX11007-038	TRANSISTOR GRN V BOTTOM RETRACE BOOST
Q7013	190482	1A01101-01A	TRANSISTOR RED H AMP
Q7014	204303	1A02105-01A	TRANSISTOR RED H AMP
Q7015	214642	XX60410-980	TRANSISTOR RED TOP RETRACE BOOST
Q7016	204300	XX10599-300	TRANSISTOR RED TOP OUTPUT
Q7017	204301	XX10599-200	TRANSISTOR RED BOTTOM OUTPUT
Q7019	190482	1A01101-01A	TRANSISTOR RED V AMP
Q7020	204303	1A02105-01A	TRANSISTOR RED V AMP
Q7021	214642	XX60410-980	TRANSISTOR RED V TOP RETRACE BOOST
Q7022	204300	XX10599-300	TRANSISTOR RED V TOP OUTPUT
Q7023	204301	XX10599-200	TRANSISTOR RED V BOTTOM OUTPUT
Q7024	214638	XX11007-038	TRANSISTOR RED V BOTTOM RETRACE BOOST
Q7025	190482	1A01101-01A	TRANSISTOR BLU H AMP
Q7026	204303	1A02105-01A	TRANSISTOR BLU H AMP
Q7027	204302	1A02104-01A	TRANSISTOR BLU H TOP RETRACE BOOST
Q7028	204300	XX10599-300	TRANSISTOR BLU H TOP OUTPUT
Q7029	204301	XX10599-200	TRANSISTOR BLU H BOTTOM OUTPUT
Q7031	190482	1A01101-01A	TRANSISTOR BLU V AMP
Q7032	204303	1A02105-01A	TRANSISTOR BLU V AMP
Q7033	214642	XX60410-980	TRANSISTOR BLU V TOP RETRACE BOOST
Q7034	204300	XX10599-300	TRANSISTOR BLU V TOP OUTPUT
Q7035	204301	XX10599-200	TRANSISTOR BLU V BOTTOM OUTPUT
Q7036	214638	XX11007-038	TRANSISTOR BLU V BOTTOM RETRACE BOOST
Q7037	214638	XX11007-038	TRANSISTOR GRN H BOTTOM RETRACE BOOST
Q7038	214638	XX11007-038	TRANSISTOR RED H BOTTOM RETRACE BOOST
Q7039	214638	XX11007-038	TRANSISTOR BLU H BOTTOM RETRACE BOOST
Q7055	214642	XX60410-980	TRANSISTOR GRN H TOP RETRACE BOOST
R7001	181483	XX60443-810	RES CMF 1/8W 2% 3.6K
R7004	192835	XX40437-550	RES CMF 1/8W 5% 15K
R7005	174364	XX60443-710	RES CMF 1/8W 5% 10K (SEE NOTE@)
R7005	175317	XX30939-480	RES CF 1/4W 5% 10K (SEE NOTE@)

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R7006	829036	XX50885-840	* RES CF 1/4W 5% 36R (SEE NOTE@)
R7006	232527	XX41088-009	* RES CFF .3W 5% 39R (SEE NOTE@)
R7007	181050	XX11064-720	RES CMF 1/8W 5% 360R
R7009	233165	XX20470-270	* RES MFFP 1W 5% 1R (SEE NOTE@)
R7009	238965	XX90182-700	* RES MFF 1/2W 10% 1R (SEE NOTE@)
R7010	233165	XX20470-270	* RES MFFP 1W 5% 1R (SEE NOTE@)
R7010	238965	XX90182-700	* RES MFF 1/2W 10% 1R (SEE NOTE@)
R7011	204305	XX50884-020	RES MF 1W 5% 6.2K
R7012	204305	XX50884-020	RES MF 1W 5% 6.2K
R7013	204305	XX50884-020	RES MF 1W 5% 6.2K
R7014	204305	XX50884-020	RES MF 1W 5% 6.2K
R7015	181080	XX40437-630	RES CMF 1/8W 2% 3.3K
R7016	196066	XX80442-770	* RES MF 2W 5% 2.2R
R7017	175355	XX11059-750	RES CF 1/4W 5% 300K
R7018	174349	XX50885-650	RES CMF 1/8W 5% 2.7K
R7019	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7020	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7021	175317	XX30939-480	RES CF 1/4W 5% 10K
R7022	181483	XX60443-810	RES CMF 1/8W 2% 3.6K
R7025	192835	XX40437-550	RES CMF 1/8W 5% 15K
R7026	174364	XX60443-710	RES CMF 1/8W 5% 10K (SEE NOTE@)
R7026	175317	XX30939-480	RES CF 1/4W 5% 10K (SEE NOTE@)
R7027	829036	XX50885-840	* RES CF 1/4W 5% 36R (SEE NOTE@)
R7027	232527	XX41088-009	* RES CFF .3W 5% 39R (SEE NOTE@)
R7028	181050	XX11064-720	RES CMF 1/8W 5% 360R
R7029	832251	XX11061-890	RES MFFP 2W 5% 5.1K
R7030	233165	XX20470-270	* RES MFFP 1W 5% 1R (SEE NOTE@)
R7030	238965	XX90182-700	* RES MFF 1/2W 10% 1R (SEE NOTE@)
R7031	233165	XX20470-270	* RES MFFP 1W 5% 1R (SEE NOTE@)
R7031	238965	XX90182-700	* RES MFF 1/2W 10% 1R (SEE NOTE@)
R7032	176818	XX30942-940	RES CMF 1/8W 5% 100R
R7033	175317	XX30939-480	RES CF 1/4W 5% 10K
R7035	174349	XX50885-650	RES CMF 1/8W 5% 2.7K
R7036	181080	XX40437-630	RES CMF 1/8W 2% 3.3K
R7037	196066	XX80442-770	* RES MF 2W 5% 2.2R
R7038	175355	XX11059-750	RES CF 1/4W 5% 300K
R7039	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7040	204305	XX50884-020	RES MF 1W 5% 6.2K
R7042	176818	XX30942-940	RES CMF 1/8W 5% 100R
R7043	181483	XX60443-810	RES CMF 1/8W 2% 3.6K
R7046	192835	XX40437-550	RES CMF 1/8W 5% 15K
R7047	174364	XX60443-710	RES CMF 1/8W 5% 10K (SEE NOTE@)
R7047	175317	XX30939-480	RES CF 1/4W 5% 10K (SEE NOTE@)
R7048	829036	XX50885-840	* RES CF 1/4W 5% 36R (SEE NOTE@)
R7048	232527	XX41088-009	* RES CFF .3W 5% 39R (SEE NOTE@)
R7049	181050	XX11064-720	RES CMF 1/8W 5% 360R
R7051	176818	XX30942-940	RES CMF 1/8W 5% 100R
R7052	174349	XX50885-650	RES CMF 1/8W 5% 2.7K
R7053	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7054	204305	XX50884-020	RES MF 1W 5% 6.2K
R7055	181080	XX40437-630	RES CMF 1/8W 2% 3.3K
R7056	196066	XX80442-770	* RES MF 2W 5% 2.2R
R7057	175355	XX11059-750	RES CF 1/4W 5% 300K
R7058	233165	XX20470-270	* RES MFFP 1W 5% 1R (SEE NOTE@)
R7058	238965	XX90182-700	* RES MFF 1/2W 10% 1R (SEE NOTE@)
R7059	233165	XX20470-270	* RES MFFP 1W 5% 1R (SEE NOTE@)
R7059	238965	XX90182-700	* RES MFF 1/2W 10% 1R (SEE NOTE@)
R7060	832251	XX11061-890	RES MFFP 2W 5% 5.1K
R7061	832251	XX11061-890	RES MFFP 2W 5% 5.1K
R7062	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7063	832251	XX11061-890	RES MFFP 2W 5% 5.1K
R7064	181483	XX60443-810	RES CMF 1/8W 2% 3.6K
R7067	192835	XX40437-550	RES CMF 1/8W 5% 15K
R7068	174364	XX60443-710	RES CMF 1/8W 5% 10K (SEE NOTE@)
R7068	175317	XX30939-480	RES CF 1/4W 5% 10K (SEE NOTE@)
R7069	829036	XX50885-840	* RES CF 1/4W 5% 36R (SEE NOTE@)
R7069	232527	XX41088-009	* RES CFF .3W 5% 39R (SEE NOTE@)
R7070	181050	XX11064-720	RES CMF 1/8W 5% 360R
R7071	832251	XX11061-890	RES MFFP 2W 5% 5.1K
R7072	176818	XX30942-940	RES CMF 1/8W 5% 100R
R7073	174349	XX50885-650	RES CMF 1/8W 5% 2.7K
R7074	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7075	204305	XX50884-020	RES MF 1W 5% 6.2K
R7076	181080	XX40437-630	RES CMF 1/8W 2% 3.3K
R7077	196066	XX80442-770	* RES MF 2W 5% 2.2R
R7078	175355	XX11059-750	RES CF 1/4W 5% 300K
R7079	233165	XX20470-270	* RES MFFP 1W 5% 1R (SEE NOTE@)
R7079	238965	XX90182-700	* RES MFF 1/2W 10% 1R (SEE NOTE@)
R7080	233165	XX20470-270	* RES MFFP 1W 5% 1R (SEE NOTE@)
R7080	238965	XX90182-700	* RES MFF 1/2W 10% 1R (SEE NOTE@)
R7081	176818	XX30942-940	RES CMF 1/8W 5% 100R
R7082	174349	XX50885-650	RES CMF 1/8W 5% 2.7K
R7083	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7084	204305	XX50884-020	RES MF 1W 5% 6.2K
R7085	181483	XX60443-810	RES CMF 1/8W 2% 3.6K
R7088	192835	XX40437-550	RES CMF 1/8W 5% 15K
R7089	174364	XX60443-710	RES CMF 1/8W 5% 10K (SEE NOTE@)
R7089	175317	XX30939-480	RES CF 1/4W 5% 10K (SEE NOTE@)
R7090	829036	XX50885-840	* RES CF 1/4W 5% 36R (SEE NOTE@)
R7090	232527	XX41088-009	* RES CFF .3W 5% 39R (SEE NOTE@)
R7091	181050	XX11064-720	RES CMF 1/8W 5% 360R
R7093	176818	XX30942-940	RES CMF 1/8W 5% 100R
R7094	174349	XX50885-650	RES CMF 1/8W 5% 2.7K
R7095	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7096	204305	XX50884-020	RES MF 1W 5% 6.2K
R7097	181080	XX40437-630	RES CMF 1/8W 2% 3.3K
R7098	196066	XX80442-770	* RES MF 2W 5% 2.2R
R7099	175355	XX11059-750	RES CF 1/4W 5% 300K
R7100	233165	XX20470-270	* RES MFFP 1W 5% 1R (SEE NOTE@)
R7100	238965	XX90182-700	* RES MFF 1/2W 10% 1R (SEE NOTE@)
R7101	233165	XX20470-270	* RES MFFP 1W 5% 1R (SEE NOTE@)
R7101	238965	XX90182-700	* RES MFF 1/2W 10% 1R (SEE NOTE@)
R7104	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7106	181483	XX60443-810	RES CMF 1/8W 2% 3.6K
R7109	192835	XX40437-550	RES CMF 1/8W 5% 15K
R7011	174364	XX60443-710	RES CMF 1/8W 5% 10K (SEE NOTE@)
R7110	175317	XX30939-480	RES CF 1/4W 5% 10K (SEE NOTE@)
R7111	829036	XX50885-840	* RES CF 1/4W 5% 36R (SEE NOTE@)
R7111	232527	XX41088-009	* RES CFF .3W 5% 39R (SEE NOTE@)
R7112	181050	XX11064-720	RES CMF 1/8W 5% 360R
R7113	832251	XX11061-890	RES MFFP 2W 5% 5.1K
R7114	176818	XX30942-940	RES CMF 1/8W 5% 100R
R7115	174349	XX50885-650	RES CMF 1/8W 5% 2.7K
R7116	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7117	204305	XX50884-020	RES MF 1W 5% 6.2K
R7118	181080	XX40437-630	RES CMF 1/8W 2% 3.3K
R7119	196066	XX80442-770	* RES MF 2W 5% 2.2R
R7120	175355	XX11059-750	RES CF 1/4W 5% 300K
R7121	233165	XX20470-270	* RES MFFP 1W 5% 1R (SEE NOTE@)
R7121	238965	XX90182-700	* RES MFF 1/2W 10% 1R (SEE NOTE@)

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R7122	233165	XX20470-270	* RES MFFP 1W 5% 1R (SEE NOTE@)
R7122	238965	XX90182-700	* RES MFF 1/2W 10% 1R (SEE NOTE@)
R7123	176818	XX30942-940	RES CMF 1/8W 5% 100R
R7124	174349	XX50885-650	RES CMF 1/8W 5% 2.7K
R7125	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7126	204305	XX50884-020	RES MF 1W 5% 6.2K
R7127	176818	XX30942-940	RES CMF 1/8W 5% 100R
R7128	176818	XX30942-940	RES CMF 1/8W 5% 100R
R7129	176818	XX30942-940	RES CMF 1/8W 5% 100R
R7130	174349	XX50885-650	RES CMF 1/8W 5% 2.7K
R7131	174349	XX50885-650	RES CMF 1/8W 5% 2.7K
R7132	174349	XX50885-650	RES CMF 1/8W 5% 2.7K
R7133	174348	XX30942-990	RES CMF 1/8W 5% 1K
R7134	174348	XX30942-990	RES CMF 1/8W 5% 1K
R7135	174348	XX30942-990	RES CMF 1/8W 5% 1K
R7136	174348	XX30942-990	RES CMF 1/8W 5% 1K
R7137	174348	XX30942-990	RES CMF 1/8W 5% 1K
R7138	174348	XX30942-990	RES CMF 1/8W 5% 1K
R7201	175317	XX30939-480	RES CF 1/4W 5% 10K
R7203	175317	XX30939-480	RES CF 1/4W 5% 10K
R7204	175317	XX30939-480	RES CF 1/4W 5% 10K
R7205	175317	XX30939-480	RES CF 1/4W 5% 10K
R7207	175317	XX30939-480	RES CF 1/4W 5% 10K
R7208	175317	XX30939-480	RES CF 1/4W 5% 10K
R7209	175317	XX30939-480	RES CF 1/4W 5% 10K
R7210	175317	XX30939-480	RES CF 1/4W 5% 10K
R7211	175317	XX30939-480	RES CF 1/4W 5% 10K
R7213	181062	XX11064-820	RES CMF 1/8W 5% 51K
R7214	181062	XX11064-820	RES CMF 1/8W 5% 51K
R7215	181062	XX11064-820	RES CMF 1/8W 5% 51K
R7216	181062	XX11064-820	RES CMF 1/8W 5% 51K
R7217	181062	XX11064-820	RES CMF 1/8W 5% 51K
R7218	181062	XX11064-820	RES CMF 1/8W 5% 51K
R7219	176818	XX30942-940	RES CMF 1/8W 5% 100R
R7220	174349	XX50885-650	RES CMF 1/8W 5% 2.7K
R7221	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7222	204305	XX50884-020	RES MF 1W 5% 6.2K
R7223	175317	XX30939-480	RES CF 1/4W 5% 10K
U7001	206405	1A51152-01A	IC ERROR AMP
U7002	206405	1A51152-01A	IC ERROR AMP
U7003	206405	1A51152-01A	IC ERROR AMP
	173269	2863229-001	CLIP, TRANSISTOR
	154397	2870460-001	WIRE SADDLE .66 HIGH
	154385	2870929-003	WIRE TIE, TWIST END

PTV AUXILIARY CBA

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	203053	2F27009-501	● CIRCUIT COMPLETE CTC169BL,BM,BN,BT,BU,BW,HM,HN,PA,PB,PC,PD,PT,PU,PV,PW,PX
C7001	204293	2841258-81M	CAPCD 120PF M Z5P 250V
C7002	200141	2821714-224	CAP POLY .1UF K 63V (SEE NOTE@)
C7002	204294	2821714-236	CAP POLY 1UF K 63V (SEE NOTE@)
C7003	175807	2841260-52M	CAPCD 1000PF J Z5P 1.5KV (SEE NOTE@)
C7003	142762	1490141-52M	CAPCD 2200PF M Z5P 250V (SEE NOTE@)
C7004	189991	1C30179-10A	CAP LYTC 1UF M 100V
C7005	153970	2841259-22M	CAPCD 220PF K Z5P 250V
C7006	174383	1C30111-33A	CAP LYTC 330UF M 10V
C7007	189981	1C30150-10A	CAP LYTC 10UF M 50V (SEE NOTE@)
C7007	214698	XX11054-950	CAP LYTC 10UF M 63V (SEE NOTE@)
C7008	189981	1C30150-10A	CAP LYTC 10UF M 50V (SEE NOTE@)
C7008	214698	XX11054-950	CAP LYTC 10UF M 63V (SEE NOTE@)
C7009	189981	1C30150-10A	CAP LYTC 10UF M 50V (SEE NOTE@)
C7009	214698	XX11054-950	CAP LYTC 10UF M 63V (SEE NOTE@)
C7010	189981	1C30150-10A	CAP LYTC 10UF M 50V (SEE NOTE@)
C7010	214698	XX11054-950	CAP LYTC 10UF M 63V (SEE NOTE@)
C7011	204293	2841258-81M	CAPCD 120PF M Z5P 250V
C7012	174383	1C30111-33A	CAP LYTC 330UF M 10V
C7013	200141	2821714-224	CAP POLY .1UF K 63V (SEE NOTE@)
C7013	204294	2821714-236	CAP POLY 1UF K 63V (SEE NOTE@)
C7014	189991	1C30179-10A	CAP LYTC 1UF M 100V
C7015	156239	1C30160-10A	CAP LYTC 10UF M 63V (SEE NOTE@)
C7015	214698	XX11054-950	CAP LYTC 10UF M 63V (SEE NOTE@)
C7016	156239	1C30160-10A	CAP LYTC 10UF M 63V (SEE NOTE@)
C7016	214698	XX11054-950	CAP LYTC 10UF M 63V (SEE NOTE@)
C7017	148405	2841253-82M	CAPCD 820PF K Z5P 50V
C7018	148405	2841253-82M	CAPCD 820PF K Z5P 50V
C7021	204293	2841258-81M	CAPCD 120PF M Z5P 250V
C7022	200141	2821714-224	CAP POLY .1UF K 63V (SEE NOTE@)
C7022	204294	2821714-236	CAP POLY 1UF K 63V (SEE NOTE@)
C7023	156239	1C30160-10A	CAP LYTC 10UF M 63V (SEE NOTE@)
C7023	214698	XX11054-950	CAP LYTC 10UF M 63V (SEE NOTE@)
C7024	189991	1C30179-10A	CAP LYTC 1UF M 100V
C7026	174383	1C30111-33A	CAP LYTC 330UF M 10V
C7027	189981	1C30150-10A	CAP LYTC 10UF M 50V (SEE NOTE@)
C7027	214698	XX11054-950	CAP LYTC 10UF M 63V (SEE NOTE@)
C7030	189981	1C30150-10A	CAP LYTC 10UF M 50V (SEE NOTE@)
C7030	214698	XX11054-950	CAP LYTC 10UF M 63V (SEE NOTE@)
C7031	204293	2841258-81M	CAPCD 120PF M Z5P 250V
C7032	156239	1C30160-10A	CAP LYTC 10UF M 63V (SEE NOTE@)
C7032	214698	XX11054-950	CAP LYTC 10UF M 63V (SEE NOTE@)
C7033	200141	2821714-224	CAP POLY .1UF K 63V (SEE NOTE@)
C7033	204294	2821714-236	CAP POLY 1UF K 63V (SEE NOTE@)
C7034	189991	1C30179-10A	CAP LYTC 1UF M 100V
C7035	156239	1C30160-10A	CAP LYTC 10UF M 63V (SEE NOTE@)
C7035	214698	XX11054-950	CAP LYTC 10UF M 63V (SEE NOTE@)
C7036	174383	1C30111-33A	CAP LYTC 330UF M 10V
C7037	189981	1C30150-10A	CAP LYTC 10UF M 50V (SEE NOTE@)
C7037	214698	XX11054-950	CAP LYTC 10UF M 63V (SEE NOTE@)
C7039	174383	1C30111-33A	CAP LYTC 330UF M 10V
C7040	189981	1C30150-10A	CAP LYTC 10UF M 50V (SEE NOTE@)
C7040	214698	XX11054-950	CAP LYTC 10UF M 63V (SEE NOTE@)
C7041	204293	2841258-81M	CAPCD 120PF M Z5P 250V
C7042	200141	2821714-224	CAP POLY .1UF K 63V (SEE NOTE@)
C7042	204294	2821714-236	CAP POLY 1UF K 63V (SEE NOTE@)
C7043	156239	1C30160-10A	CAP LYTC 10UF M 63V (SEE NOTE@)
C7043	214698	XX11054-950	CAP LYTC 10UF M 63V (SEE NOTE@)
C7044	189991	1C30179-10A	CAP LYTC 1UF M 100V
C7046	174383	1C30111-33A	CAP LYTC 330UF M 10V
C7047	189981	1C30150-10A	CAP LYTC 10UF M 50V (SEE NOTE@)
C7047	214698	XX11054-950	CAP LYTC 10UF M 63V (SEE NOTE@)
C7050	189981	1C30150-10A	CAP LYTC 10UF M 50V (SEE NOTE@)

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
C7050	214698	XX11054-950	CAP LYTC 10UF M 63V (SEE NOTE@)
C7051	204293	2841258-81M	CAPCD 120PF M Z5P 250V
C7052	156239	1C30160-10A	CAP LYTC 10UF M 63V (SEE NOTE@)
C7052	214698	XX11054-950	CAP LYTC 10UF M 63V (SEE NOTE@)
C7053	200141	2821714-224	CAP POLY .1UF K 63V (SEE NOTE@)
C7053	204294	2821714-236	CAP POLY 1UF K 63V (SEE NOTE@)
C7054	189991	1C30179-10A	CAP LYTC 1UF M 100V
C7055	156239	1C30160-10A	CAP LYTC 10UF M 63V (SEE NOTE@)
C7055	214698	XX11054-950	CAP LYTC 10UF M 63V (SEE NOTE@)
C7056	174383	1C30111-33A	CAP LYTC 330UF M 10V
C7057	189981	1C30150-10A	CAP LYTC 10UF M 50V (SEE NOTE@)
C7057	214698	XX11054-950	CAP LYTC 10UF M 63V (SEE NOTE@)
C7059	174383	1C30111-33A	CAP LYTC 330UF M 10V
C7060	189981	1C30150-10A	CAP LYTC 10UF M 50V (SEE NOTE@)
C7060	214698	XX11054-950	CAP LYTC 10UF M 63V (SEE NOTE@)
C7061	155090	2841254-22M	CAPCD 1500PF K Z5P 50V
C7062	143878	2841253-62M	CAPCD 560PF K Z5P 50V
C7063	149717	2841253-52M	CAPCD 470PF K Z5P 50V (SEE NOTE@)
C7063	146179	2841259-62M	CAPCD 470PF K Z5P 250V (SEE NOTE@)
C7065	200436	1C30169-68A	CAP LYTC 6.8UF M 63V
C7066	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C7067	146179	2841259-62M	CAPCD 470PF K Z5P 250V
C7068	149717	2841253-52M	CAPCD 470PF K Z5P 50V (SEE NOTE@)
C7068	146179	2841259-62M	CAPCD 470PF K Z5P 250V (SEE NOTE@)
C7069	149717	2841253-52M	CAPCD 470PF K Z5P 50V (SEE NOTE@)
C7069	146179	2841259-62M	CAPCD 470PF K Z5P 250V (SEE NOTE@)
C7070	152080	1C30161-10A	CAP LYTC 100UF M 63V
C7071	152080	1C30161-10A	CAP LYTC 100UF M 63V
C7072	190721	1C31142-10A	CAP LYTC 1000UF 35V
C7073	190721	1C31142-10A	CAP LYTC 1000UF 35V
C7074	190538	2821785-005	CAPCD 680PF M Z5P 1KV
C7075	200146	1C20120-01A *	CAP POLY 5600PF J 600V
C7076	190538	2821785-005	CAPCD 680PF M Z5P 1KV
C7077	204294	2821714-236	CAP POLY 1UF K 63V
C7078	176665	2875500-006	CAP LYTC 270UF M 200V
C7079	195070	1C30161-22A	CAP LYTC 220UF M 63V
C7080	161204	973991-259	CAP POLY 4700PF K 600V (SEE NOTE@)
C7080	210773	XX11096-330	CAP POLY 3300PF 1.6KV (SEE NOTE@)
C7081	161204	973991-259	CAP POLY 4700PF K 600V
C7082	204295	1C30161-33A	CAP LYTC 330UF M 63V
C7083	204295	1C30161-33A	CAP LYTC 330UF M 63V
C7087	189991	1C30179-10A	CAP LYTC 1UF M 100V
C7091	143879	2841253-92M	CAPCD 1000PF K Z5P 50V
C7092	200141	2821714-224	CAP POLY .1UF K 63V
C7099	157930	2841255-61N	CAPCD .015UF M Z5T 50V
C7100	145742	2841254-12M	CAPCD 1200PF K Z5P 50V
C7102	149189	2821714-426	CAP POLY .15UF M 100V
C7103	151578	1C30140-33A	CAP LYTC 33UF M 35V
C7104	143879	2841253-92M	CAPCD 1000PF K Z5P 50V
C7105	204294	2821714-236	CAP POLY 1UF K 63V
C7106	189981	1C30150-10A	CAP LYTC 10UF M 50V (SEE NOTE@)
C7106	214698	XX11054-950	CAP LYTC 10UF M 63V (SEE NOTE@)
C7111	142762	2841260-52M	CAPCD 2200PF M Z5P 250V
C7112	148405	2841253-82M	CAPCD 820PF K Z5P 50V
C7113	142762	2841260-52M	CAPCD 2200PF M Z5P 250V
C7114	153970	2841259-22M	CAPCD 220PF K Z5P 250V
C7115	142762	2841260-52M	CAPCD 2200PF M Z5P 250V
C7116	148405	2841253-82M	CAPCD 820PF K Z5P 50V
C7117	142762	2841260-52M	CAPCD 2200PF M Z5P 250V
C7118	153970	2841259-22M	CAPCD 220PF K Z5P 250V
C7119	148405	2841253-82M	CAPCD 820PF K Z5P 50V

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
C7120	148405	2841253-82M	CAPCD 820PF K Z5P 50V
C7121	148405	2841253-82M	CAPCD 820PF K Z5P 50V
C7122	148405	2841253-82M	CAPCD 820PF K Z5P 50V
C7134	191959	1C30130-47A	CAP LYTC 47UF M 25V
C7137	204296	1C20110-61A *	CAP POLY 2.06UF J 250V
C7139	150733	2841260-12M	CAPCD 1000PF K Z5P 250V
C7140	145742	2841254-12M	CAPCD 1200PF K Z5P 50V
C7141	145742	2841254-12M	CAPCD 1200PF K Z5P 50V
C7142	145742	2841254-12M	CAPCD 1200PF K Z5P 50V
C7143	145742	2841254-12M	CAPCD 1200PF K Z5P 50V
C7144	145742	2841254-12M	CAPCD 1200PF K Z5P 50V
C7145	145742	2841254-12M	CAPCD 1200PF K Z5P 50V
C7150	206404	2841258-22A	CAPCD 39PF K NPO 250V
C7151	206404	2841258-22A	CAPCD 39PF K NPO 250V
C7152	206404	2841258-22A	CAPCD 39PF K NPO 250V
C7153	145253	2841258-82M	CAPCD 120PF K Z5P 250V
C7154	145253	2841258-82M	CAPCD 120PF K Z5P 250V
C7155	153970	2841259-22M	CAPCD 220PF K Z5P 250V
CR7001	139706	1471872-008	DIODE
CR7002	139706	1471872-008	DIODE
CR7003	139706	1471872-008	DIODE
CR7004	164717	1471872-006	DIODE
CR7005	164717	1471872-006	DIODE
CR7006	164588	2820546-002	DIODE
CR7007	164588	2820546-002	DIODE
CR7008	164588	2820546-002	DIODE
CR7009	164588	2820546-002	DIODE
CR7010	139706	1471872-008	DIODE
CR7011	139706	1471872-008	DIODE
CR7012	139706	1471872-008	DIODE
CR7013	164717	1471872-006	DIODE
CR7014	164717	1471872-006	DIODE
CR7015	129938	99201-111	DIODE ZENER 6.2V .4W
CR7016	129938	99201-111	DIODE ZENER 6.2V .4W
CR7019	139706	1471872-008	DIODE
CR7020	139706	1471872-008	DIODE
CR7021	139706	1471872-008	DIODE
CR7022	164588	2820546-002	DIODE
CR7023	164588	2820546-002	DIODE
CR7024	129938	99201-111	DIODE ZENER 6.2V .4W
CR7025	164717	1471872-006	DIODE
CR7026	164717	1471872-006	DIODE
CR7028	139706	1471872-008	DIODE
CR7029	139706	1471872-008	DIODE
CR7030	139706	1471872-008	DIODE
CR7031	164588	2820546-002	DIODE
CR7032	164588	2820546-002	DIODE
CR7033	129938	99201-111	DIODE ZENER 6.2V .4W
CR7034	164588	2820546-002	DIODE
CR7035	164588	2820546-002	DIODE
CR7036	129938	99201-111	DIODE ZENER 6.2V .4W
CR7037	139706	1471872-008	DIODE
CR7038	139706	1471872-008	DIODE
CR7039	139706	1471872-008	DIODE
CR7040	164588	2820546-002	DIODE
CR7041	164588	2820546-002	DIODE
CR7042	129938	99201-111	DIODE ZENER 6.2V .4W
CR7046	139706	1471872-008	DIODE
CR7047	139706	1471872-008	DIODE
CR7048	139706	1471872-008	DIODE
CR7049	164588	2820546-002	DIODE
CR7050	164588	2820546-002	DIODE
CR7051	129938	99201-111	DIODE ZENER 6.2V .4W
CR7052	164588	2820546-002	DIODE
CR7053	164588	2820546-002	DIODE
CR7054	129938	99201-111	DIODE ZENER 6.2V .4W
CR7055	140971	1A30100-02A	DIODE
CR7056	158688	99201-222	DIODE ZENER 18V .4W
CR7057	158688	99201-222	DIODE ZENER 18V .4W
CR7058	164717	1471872-006	DIODE
CR7059	176296	1476171-031	DIODE
CR7060	176296	1476171-031	DIODE
CR7061	164590	2820545-002	DIODE
CR7062	164590	2820545-002	DIODE
CR7063	176296	1476171-031	DIODE
CR7064	176296	1476171-031	DIODE
CR7065	164717	1471872-006	DIODE
CR7066	164717	1471872-006	DIODE
CR7067	164717	1471872-006	DIODE
CR7068	164717	1471872-006	DIODE
CR7069	164717	1471872-006	DIODE

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
CR7070	164717	1471872-006	DIODE
CR7072	164588	2820546-002	DIODE
CR7073	164588	2820546-002	DIODE
CR7074	176748	99201-225	DIODE ZENER 24V .4W
CR7075	164717	1471872-006	DIODE
CR7076	196062	2820500-001	DIODE
CR7077	196062	2820500-001	DIODE
CR7078	164717	1471872-006	DIODE
CR7080	130044	99201-216	DIODE ZENER 10V .4W
CR7082	164717	1471872-006	DIODE
FB7001	153328	2843165-004	BEAD
FB7002	152103	2843117-002	BEAD
FB7003	152103	2843117-002	BEAD
FB7004	154042	2843117-005	BEAD
FB7005	154042	2843117-005	BEAD
FB7006	152102	2843117-001	BEAD
FB7007	152102	2843117-001	BEAD
FB7008	152102	2843117-001	BEAD
FB7009	152102	2843117-001	BEAD
FB7010	154042	2843117-005	BEAD
FB7011	154042	2843117-005	BEAD
FB7012	154042	2843117-005	BEAD
FB7013	154042	2843117-005	BEAD
FB7017	154052	2843165-001	BEAD
FB7018	154042	2843117-005	BEAD
FB7019	154042	2843117-005	BEAD
FB7020	154042	2843117-005	BEAD
FB7021	154042	2843117-005	BEAD
FB7022	154042	2843117-005	BEAD
FB7023	154042	2843117-005	BEAD
FB7024	154042	2843117-005	BEAD
FB7025	154042	2843117-005	BEAD
J7005	201134	XX10005-010	CONNECTOR 8 PIN CONV
J7009	204297	XX90446-900	CONNECTOR 6 PIN R YOKE
J7010	204297	XX90446-900	CONNECTOR 6 PIN G YOKE
J7011	204297	XX90446-900	CONNECTOR 6 PIN B YOKE
J7012	204298	1466404-322	* CONNECTOR 8 PIN DEFL
J7013	202910	XX10004-990	CONNECTOR 7 PIN B DRVR
J7014	202910	XX10004-990	CONNECTOR 7 PIN G DRVR
J7015	202910	XX10004-990	CONNECTOR 7 PIN R DRVR
J7016	204299	XX70308-300	CONNECTOR 4 PIN B YOKE
J7017	204299	XX70308-300	CONNECTOR 4 PIN G YOKE
J7018	204299	XX70308-300	CONNECTOR 4 PIN R YOKE
J7019	202910	XX10004-990	CONNECTOR 7 PIN CONV
L7001	196065	1497050-15A	COIL 22UH
L7002	196065	1497050-15A	COIL 22UH
L7003	175409	2873607-125	* COIL 10UH
L7004	196065	1497050-15A	COIL 22UH
L7005	196065	1497050-15A	COIL 22UH
L7006	196065	1497050-15A	COIL 22UH
L7007	196065	1497050-15A	COIL 22UH
Q7001	148996	1417318-003	TRANSISTOR AMP
Q7002	189988	1A01102-01A	TRANSISTOR AMP
Q7004	204300	XX10599-300	TRANSISTOR TOP OUTPUT
Q7005	204301	XX10599-200	TRANSISTOR BOTTOM OUT
Q7007	148996	1417318-003	TRANSISTOR AMP
Q7008	189988	1A01102-01A	TRANSISTOR AMP
Q7009	204302	1A02104-01A	TRANSISTOR RETRACE BOOST
Q7010	204300	XX10599-300	TRANSISTOR TOP OUTPUT
Q7011	204301	XX10599-200	TRANSISTOR BOTTOM OUT
Q7012	204303	1A02105-01A	TRANSISTOR RETRACE BOOST
Q7013	148996	1417318-003	TRANSISTOR AMP
Q7014	189988	1A01102-01A	TRANSISTOR AMP
Q7015	204302	1A02104-01A	TRANSISTOR RETRACE BOOST
Q7016	204300	XX10599-300	TRANSISTOR TOP OUTPUT
Q7017	204301	XX10599-200	TRANSISTOR BOTTOM OUT
Q7019	148996	1417318-003	TRANSISTOR AMP
Q7020	189988	1A01102-01A	TRANSISTOR AMP
Q7021	204302	1A02104-01A	TRANSISTOR RETRACE BOOST
Q7022	204300	XX10599-300	TRANSISTOR TOP OUTPUT
Q7023	204301	XX10599-200	TRANSISTOR BOTTOM OUT
Q7024	204303	1A02105-01A	TRANSISTOR RETRACE BOOST
Q7025	148996	1417318-003	TRANSISTOR AMP

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
Q7026	189988	1A01102-01A	TRANSISTOR AMP
Q7027	204302	1A02104-01A	TRANSISTOR RETRACE BOOST
Q7028	204300	XX10599-300	TRANSISTOR TOP OUTPUT
Q7029	204301	XX10599-200	TRANSISTOR BOTTOM OUT
Q7031	148996	1417318-003	TRANSISTOR AMP
Q7032	189988	1A01102-01A	TRANSISTOR AMP
Q7033	204302	1A02104-01A	TRANSISTOR RETRACE BOOST
Q7034	204300	XX10599-300	TRANSISTOR TOP OUTPUT
Q7035	204301	XX10599-200	TRANSISTOR BOTTOM OUT
Q7036	204303	1A02105-01A	TRANSISTOR RETRACE BOOST
Q7037	164599	1417441-001	TRANSISTOR REG OUTPUT
Q7040	175544	1417321-006	TRANSISTOR AMP
Q7042	143802	1417330-010	TRANSISTOR SCAN DETECT
Q7043	151974	1417303-005	TRANSISTOR H SCAN DETECT
Q7044	146847	1417306-013	TRANSISTOR H SCAN DETECT
Q7048	143797	1417318-006	TRANSISTOR SCAN LOSS
Q7050	146847	1417306-013	TRANSISTOR H SCAN DETECT
Q7051	143802	1417330-010	TRANSISTOR REG ON SW
R7001	175319	2819434-710	RES CF 1/4W 2% 3.6K
R7003	175567	2819434-386	RES CF 1/4W 5% 360R
R7004	175311	2819434-402	RES CF 1/4W 5% 1.6K
R7005	175412	2819434-389	RES CF 1/4W 5% 470R
R7006	177714	2819434-368	* RES CF 1/4W 5% 62R
R7007	175041	2819434-423	RES CF 1/4W 5% 12K
R7008	204304	2819435-410	RES CF 1/2W 5% 3.6K
R7009	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7010	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7013	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7014	204305	2874124-416	RES MF 1W 5% 6.2K
R7015	175352	2819434-709	RES CF 1/4W 2% 3.3K
R7016	196066	2874125-333	* RES MFFP 2W 5% 2.2R
R7017	175355	2819434-456	RES CF 1/4W 5% 300K
R7018	176648	2819434-407	RES CF 1/4W 5% 2.7K
R7019	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7020	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7021	175317	2819434-421	RES CF 1/4W 5% 10K
R7022	175319	2819434-710	RES CF 1/4W 2% 3.6K
R7024	175055	2819434-397	RES CF 1/4W 5% 1K
R7025	179814	2819434-398	RES CF 1/4W 5% 1.1K
R7026	176661	2819434-396	RES CF 1/4W 5% 910R
R7027	177714	2819434-368	* RES CF 1/4W 5% 62R
R7028	175041	2819434-423	RES CF 1/4W 5% 12K
R7029	175347	2819435-421	RES CF 1/2W 5% 10K
R7030	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7031	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7032	175325	2819434-373	RES CF 1/4W 5% 100R
R7033	175317	2819434-421	RES CF 1/4W 5% 10K
R7035	176648	2819434-407	RES CF 1/4W 5% 2.7K
R7036	175352	2819434-709	RES CF 1/4W 2% 3.3K
R7037	196066	2874125-333	* RES MFFP 2W 5% 2.2R
R7038	175355	2819434-456	RES CF 1/4W 5% 300K
R7039	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7040	204305	2874124-416	RES MF 1W 5% 6.2K
R7042	175325	2819434-373	RES CF 1/4W 5% 100R
R7043	175319	2819434-710	RES CF 1/4W 2% 3.6K
R7045	175312	2819434-393	RES CF 1/4W 5% 680R
R7046	175308	2819434-399	RES CF 1/4W 5% 1.2K
R7047	175043	2819434-395	RES CF 1/4W 5% 820R
R7048	177714	2819434-368	* RES CF 1/4W 5% 62R
R7049	175041	2819434-423	RES CF 1/4W 5% 12K
R7050	179248	993290-245	RES MF 1/2W 5% 6.8K
R7051	175325	2819434-373	RES CF 1/4W 5% 100R
R7052	176648	2819434-407	RES CF 1/4W 5% 2.7K
R7053	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7054	204305	2874124-416	RES MF 1W 5% 6.2K
R7055	175352	2819434-709	RES CF 1/4W 2% 3.3K
R7056	196066	2874125-333	* RES MFFP 2W 5% 2.2R
R7057	175355	2819434-456	RES CF 1/4W 5% 300K
R7058	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7059	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7062	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7064	175319	2819434-710	RES CF 1/4W 2% 3.6K
R7066	175055	2819434-397	RES CF 1/4W 5% 1K
R7067	179814	2819434-398	RES CF 1/4W 5% 1.1K
R7068	176661	2819434-396	RES CF 1/4W 5% 910R

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R7069	177714	2819434-368	* RES CF 1/4W 5% 62R
R7070	175041	2819434-423	RES CF 1/4W 5% 12K
R7071	175347	2819435-421	RES CF 1/2W 5% 10K
R7072	175325	2819434-373	RES CF 1/4W 5% 100R
R7073	176648	2819434-407	RES CF 1/4W 5% 2.7K
R7074	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7075	204305	2874124-416	RES MF 1W 5% 6.2K
R7076	175352	2819434-709	RES CF 1/4W 2% 3.3K
R7077	196066	2874125-333	* RES MFFP 2W 5% 2.2R
R7078	175355	2819434-456	RES CF 1/4W 5% 300K
R7079	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7080	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7081	175325	2819434-373	RES CF 1/4W 5% 100R
R7082	176648	2819434-407	RES CF 1/4W 5% 2.7K
R7083	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7084	204305	2874124-416	RES MF 1W 5% 6.2K
R7085	175319	2819434-710	RES CF 1/4W 2% 3.6K
R7087	175312	2819434-393	RES CF 1/4W 5% 680R
R7088	175308	2819434-399	RES CF 1/4W 5% 1.2K
R7089	175043	2819434-395	RES CF 1/4W 5% 820R
R7090	177714	2819434-368	* RES CF 1/4W 5% 62R
R7091	175041	2819434-423	RES CF 1/4W 5% 12K
R7092	179248	2819435-417	RES CF 1/2W 5% 6.8K
R7093	175325	2819434-373	RES CF 1/4W 5% 100R
R7094	176648	2819434-407	RES CF 1/4W 5% 2.7K
R7095	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7096	204305	2874124-416	RES MF 1W 5% 6.2K
R7097	175352	2819434-709	RES CF 1/4W 2% 3.3K
R7098	196066	2874125-333	* RES MFFP 2W 5% 2.2R
R7099	175355	2819434-456	RES CF 1/4W 5% 300K
R7100	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7101	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7104	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7106	175319	2819434-710	RES CF 1/4W 2% 3.6K
R7108	175055	2819434-397	RES CF 1/4W 5% 1K
R7109	179814	2819434-398	RES CF 1/4W 5% 1.1K
R7110	176661	2819434-396	RES CF 1/4W 5% 910R
R7111	177714	2819434-368	* RES CF 1/4W 5% 62R
R7112	175041	2819434-423	RES CF 1/4W 5% 12K
R7113	175347	2819435-421	RES CF 1/2W 5% 10K
R7114	175325	2819434-373	RES CF 1/4W 5% 100R
R7115	176648	2819434-407	RES CF 1/4W 5% 2.7K
R7116	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7117	204305	2874124-416	RES MF 1W 5% 6.2K
R7118	175352	2819434-709	RES CF 1/4W 2% 3.3K
R7119	196066	2874125-333	* RES MFFP 2W 5% 2.2R
R7120	175355	2819434-456	RES CF 1/4W 5% 300K
R7121	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7122	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7123	175325	2819434-373	RES CF 1/4W 5% 100R
R7124	176648	2819434-407	RES CF 1/4W 5% 2.7K
R7125	233165	XX20470-270	* RES MFFP 1W 5% 1R
R7126	204305	2874124-416	RES MF 1W 5% 6.2K
R7127	175756	993273-370	* RES CF 1/2W 5% 75R
R7128	204306	993273-358	* RES CF 1/2W 5% 24R
R7129	175044	2819434-445	RES CF 1/4W 5% 100K
R7130	204307	993272-394	* RES CF 1/4W 5% 750R
R7131	149884	993272-399	* RES CF 1/4W 5% 1.2K
R7132	160149	1B08228-75A	* RES WW 2W 5% .75R
R7133	179238	2819434-442	RES CF 1/4W 5% 75K
R7134	175041	2819434-423	RES CF 1/4W 5% 12K
R7135	175325	2819434-373	RES CF 1/4W 5% 100R
R7136	179468	2874125-439	RES MFFP 2W 5% 56K
R7138	204308	2874126-398	RES MF 3W 5% 1.1K
R7139	204308	2874126-398	RES MF 3W 5% 1.1K
R7144	176634	2819434-417	RES CF 1/4W 5% 6.8K
R7145	175055	2819434-397	RES CF 1/4W 5% 1K
R7147	200181	2821716-152	RES CONTROL B+ ADJUST
R7148	204878	993272-428	RES CF 1/4W 5% 20K
R7152	176654	2874124-433	* RES MFFP 1W 5% 33K
R7153	175328	2819434-454	RES CF 1/4W 5% 240K
R7154	176782	2819435-449	RES CF 1/2W 5% 150K
R7155	204309	993272-415	* RES CF 1/4W 5% 5.6K
R7156	829210	993218-397	* RES CFFP 1/4W 5% 1.0K
R7157	829147	993272-389	* RES CFFP 1/4W 5% 470R
R7158	175055	2819434-397	RES CF 1/4W 5% 1K (SEE NOTE@)
R7158	108865	99206-159	RES CF 1/4W 5% 1K (SEE NOTE@)
R7159	175328	2819434-454	RES CF 1/4W 5% 240K
R7162	175311	2819434-402	RES CF 1/4W 5% 1.6K
R7165	175317	2819434-421	RES CF 1/4W 5% 10K
R7166	175044	2819434-445	RES CF 1/4W 5% 100K
R7168	176668	2819434-461	RES CF 1/4W 5% 470K
R7170	175360	2819434-425	RES CF 1/4W 5% 15K
R7172	175314	2819434-433	RES CF 1/4W 5% 33K
R7173	176668	2819434-461	RES CF 1/4W 5% 470K
R7174	175360	2819434-425	RES CF 1/4W 5% 15K
R7175	175314	2819434-433	RES CF 1/4W 5% 33K
R7188	175317	2819434-421	RES CF 1/4W 5% 10K
R7189	175417	2819434-414	RES CF 1/4W 5% 5.1K
R7190	175317	2819434-421	RES CF 1/4W 5% 10K
R7191	175363	2819434-380	RES CF 1/4W 5% 200R
R7192	175417	2819434-414	RES CF 1/4W 5% 5.1K
R7193	175351	2819434-428	RES CF 1/4W 5% 20K
R7194	175315	2819434-438	RES CF 1/4W 5% 51K
R7195	175360	2819434-425	RES CF 1/4W 5% 15K
R7201	175317	2819434-421	RES CF 1/4W 5% 10K
R7203	175317	2819434-421	RES CF 1/4W 5% 10K
R7204	175317	2819434-421	RES CF 1/4W 5% 10K
R7205	175317	2819434-421	RES CF 1/4W 5% 10K
R7207	175317	2819434-421	RES CF 1/4W 5% 10K
R7208	175317	2819434-421	RES CF 1/4W 5% 10K
R7212	176547	2819435-411	RES CF 1/2W 5% 3.9K
R7213	179296	2819434-444	RES CF 1/4W 5% 91K
R7214	179296	2819434-444	RES CF 1/4W 5% 91K
R7215	179296	2819434-444	RES CF 1/4W 5% 91K
R7216	179296	2819434-444	RES CF 1/4W 5% 91K
R7217	179296	2819434-444	RES CF 1/4W 5% 91K
R7218	179296	2819434-444	RES CF 1/4W 5% 91K
T7001	204310	1C62106-01A	* TRANSFORMER HORIZ PAR (SEE NOTE@)
T7001	210772	XX30988-690	* TRANSFORMER HORIZ PAR (SEE NOTE@)
T7002	204311	1C67100-02A	* TRANSFORMER ISOLATION
T7004	190507	1C59100-02A	* TRANSFORMER CHOKE
T7100	204312	1C61103-01A	* TRANSFORMER ISOLATION
U7001	204292	1A51126-01A	IC ERROR AMP
U7002	204292	1A51126-01A	IC ERROR AMP (SEE NOTE@)
U7002	206405	1A51152-01A	IC ERROR AMP (SEE NOTE@)
U7003	204292	1A51126-01A	IC ERROR AMP (SEE NOTE@)
U7003	206405	1A51152-01A	IC ERROR AMP (SEE NOTE@)
U7004	190719	1A51103-01A	IC REGULATOR
U7005	149018	1421754-001	IC COMPARATOR
	181032	2862928-002	CLIP, FOR Q7037
	173269	2863229-001	CLIP, TRANSISTOR
	215716	2844624-005	INSULATOR, FOR Q7037
	154397	2870460-001	SUPPORT, CABLE CLIP

POWER SUPPLY CBA

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	226118	2F33013-501	CIRCUIT COMPLETE CTC169PE,PF,PG,PH, PJ,PK,PM (SEE NOTE@)
	236174	2F33013-502	PTV POWER SUPPLY CTC169PG (SEE NOTE@)
C7001	155090	XX11055-530	CAPCD 1500PF K Z5P 50V
C7002	143878	XX80434-790	CAPCD 560PF K Z5P 50V
C7003	148067	XX90568-860	CAPCD 470PF K Z5P 50V
C7004	175120	XX80434-380	CAP LYTC 6.8UF M 100V
C7005	146179	XX30937-370	CAPCD 470PF K Z5P 250V
C7006	146179	XX30937-370	CAPCD 470PF K Z5P 250V
C7007	148067	XX90568-860	CAPCD 470PF K Z5P 50V
C7008	148067	XX90568-860	CAPCD 470PF K Z5P 50V
C7009	152080	XX11054-760	CAP LYTC 100UF M 63V
C7010	152080	XX11054-760	CAP LYTC 100UF M 63V
C7011	190721	XX30935-960	CAP LYTC 1000UF M 35V
C7012	190721	XX30935-960	CAP LYTC 1000UF M 35V
C7013	190538	XX11057-250	CAPCD 680PF M Z5P 1KV
C7014	214070	XX60435-910	* CAP POLY 8200PF J 600V CTC169PE,PF,PG,PH, PJ,PK,PM (SEE NOTE@)

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
C7014	236175	XX15050-190	CAP POLY 3300PF J 1.6K CTC169PG (SEE NOTE@)
C7015	190538	XX11057-250	CAPCD 680PF M Z5P 1KV
C7016	204294	XX90568-280	CAP POLY 1UF K 63V
C7017	176665	2875500-006	CAP LYTC 270UF M 200V CTC169PE,PF,PG,PH, PJ,PK,PM (SEE NOTE@)
C7017	236176	XX15050-260	CAP LYTC 150UF M 385 CTC169PG (SEE NOTE@)
C7018	195070	XX90568-540	CAP LYTC 220UF M 63V
C7020	236177	XX15064-080	* CAPCD 270PF J SL 2KV
C7026	226468	XX60438-640	CAP POLY .12UF J 63V
C7027	145742	XX11055-520	CAPCD 1200PF K Z5P 50V CTC169PE,PF,PG,PH, PJ,PK,PM (SEE NOTE@)
C7027	145315	XX70428-480	CAPCD 2700PF K Z5P 50V CTC169PG (SEE NOTE@)
C7028	149189	XX11054-280	CAP POLY .15UF M 100V
C7029	151578	XX11054-710	CAP LYTC 33UF M 35V
C7030	150733	XX11057-020	CAPCD 1000PF K Z5P 250V
C7037	236178	XX14035-070	CAPCD 1500PF Z Y5U 1KV
C7038	236179	XX14035-060	CAPCD 4700PF Z Y5V 1KV
C7039	236179	XX14035-060	CAPCD 4700PF Z Y5V 1KV
CR7001	164717	XX70436-540	DIODE
CR7002	226463	XX11073-680	DIODE ZENER 18V .5W
CR7005	176296	XX30946-670	DIODE
CR7006	176296	XX30946-670	DIODE
CR7007	164590	XX20474-070	DIODE
CR7008	164590	XX20474-070	DIODE
CR7009	226465	XX15058-720	DIODE
CR7010	176296	XX30946-670	DIODE
CR7011	227066	XX15047-700	DIODE
CR7012	227066	XX15047-700	DIODE
CR7013	164717	XX70436-540	DIODE
CR7014	226466	XX30948-820	DIODE ZENER 24V .5W
CR7015	176666	99201-120	DIODE ZENER 15V .4W
CR7018	164717	XX70436-540	DIODE
CR7019	176751	2811925-003	DIODE
CR7020	176751	2811925-003	DIODE
CR7021	176751	2811925-003	DIODE
CR7022	176751	2811925-003	DIODE
FB7001	226467	XX50895-750	BEAD
FB7002	152103	2843117-002	BEAD
FB7003	152103	2843117-002	BEAD
FB7004	154042	2843117-005	BEAD
FB7005	154042	2843117-005	BEAD
FB7006	152102	2843117-001	BEAD
FB7007	152102	2843117-001	BEAD
FB7008	152102	2843117-001	BEAD
FB7009	152102	2843117-001	BEAD
FB7010	154042	2843117-005	BEAD
FB7011	154042	2843117-005	BEAD
FB7012	154042	2843117-005	BEAD
FB7013	154042	2843117-005	BEAD
J7002	215542	XX60430-775	CONNECTOR 4 PIN CONV GEN
J7004	226471	XX15050-540	* CONNECTOR 6 PIN CONV AMP
L7002	215504	XX10038-070	COIL 22UH
L7003	215504	XX10038-070	COIL 22UH
L7004	215504	XX10038-070	COIL 22UH
L7005	215504	XX10038-070	COIL 22UH
Q7001	164599	1417441-001	TRANSISTOR REG OUTPUT CTC169PE,PF,PG,PH, PJ,PK,PM (SEE NOTE@)
Q7001	236182	XX15063-590	TRANSISTOR REG OUTPUT CTC169PG (SEE NOTE@)
Q7002	223704	XX50888-770	TRANSISTOR -TURN-ON
Q7003	223704	XX50888-770	TRANSISTOR TURN-ON
Q7006	223704	XX50888-770	TRANSISTOR SCAN DETECT
Q7007	177789	XX90576-540	TRANSISTOR REG -ON
R7001	175756	XX80440-070	* RES CF 1/2W 5% 75R
R7002	204306	XX11065-730	* RES CF 1/2W 5% 24R
R7003	175044	XX30939-510	RES CF 1/4W 5% 100K
R7004	829182	XX80439-900	* RES CFFP 1/4W 5% 820R
R7005	160149	XX11062-510	* RES WW 2W 5% .75R CTC169PE,PF,PG,PH, PJ,PK,PM (SEE NOTE@)
R7005	208435	XX50884-600	* RES WW 2W 5% 1.5R CTC169PG (SEE NOTE@)
R7006	179238	XX90571-140	RES CF 1/4W 5% 75K
R7007	175308	XX80437-000	RES CF 1/4W 5% 1.2K
R7008	210245	XX50882-950	RES CF 1/4W 5% 100R
R7009	176806	XX30946-870	RES MF 2W 5% 47R CTC169PE,PF,PG,PH, PJ,PK,PM (SEE NOTE@)
R7009	236181	XX15049-470	RES MF 2W 5% 100K CTC169PG (SEE NOTE@)
R7010	214113	XX11063-950	RES WW 10W 10% 560R
R7013	202069	XX11059-640	RES CF 1/4W 5% 1K
R7016	204878	XX70433-450	RES CF 1/4W 5% 20K
R7017	176796	XX11060-080	RES CF 1/2W 5% 100R
R7018	830410	XX80440-180	RES CFFP 1/2W 5% 100K CTC169PE,PF,PG,PH, PJ,PK,PM (SEE NOTE@)
R7018	236180	XX11065-940	RES CFFP 1/2W 5% 220K CTC169PG (SEE NOTE@)
R7019	830320	XX50886-210	RES CFFP 1/2W 5% 20K
R7020	175317	XX70430-740	RES CF 1/4W 2% 10K
R7021	175044	XX30939-510	RES CF 1/4W 5% 100K
R7035	175317	XX30939-480	RES CF 1/4W 5% 10K
R7036	175417	XX60441-570	RES CF 1/4W 5% 5.1K
R7037	175317	XX30939-480	RES CF 1/4W 5% 10K
R7038	175363	XX90571-090	RES CF 1/4W 5% 200R
R7039	175351	XX40435-660	RES CF 1/4W 5% 20K
R7043	829215	XX11065-250	* RES CFFP 1/4W 5% 1.5K
R7050	200181	XX30944-690	RES CONTROL B+ ADJ
R7144	176634	XX20469-490	RES CF 1/4W 5% 6.8K
R7192	175417	XX60441-570	RES CF 1/4W 5% 5.1K
R7194	205565	XX80437-030	RES CF 1/4W 5% 27K
R7195	175781	XX60442-550	* RES MF 1W 5% 10R
T7002	204311	1C67100-02A	* TRANSFORMER ISOLATION CTC169PE,PF,PG,PH, PJ,PK,PM (SEE NOTE@)
T7002	236183	XX15055-42A	* TRANSFORMER ISOLATION CTC169PG (SEE NOTE@)
T7004	190507	XX20480-440	* TRANSFORMER FILTER
T7100	226464	XX15049-94A	* TRANSFORMER SMT CTC169PE,PF,PG,PH, PJ,PK,PM (SEE NOTE@)
T7100	236184	XX10237-400	* TRANSFORMER SMT CTC169PG (SEE NOTE@)
U7004	190719	XX15041-960	IC POWER REGULATOR
	237249	2G36030-512	CABLE ASY, P7002/P8204
	237252	2G36030-516	CABLE ASY, P7004/P7020
	215716	2844624-005	INSULATOR, Q7001
	181032	2862928-002	CLIP, Q7001
	154397	2870460-001	WIRE SADDLE .66 HIGH

SPIP (PIX-IN-PIX) CBA

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	202588	2F43005-501	● CIRCUIT COMPLETE CTC169BM,HM,PH (FN REPL FOR DPIP)
		2F43005-509	● CIRCUIT COMPLETE CTC169BT (USE 2F43005-511)
	207824	2F43005-511	● CIRCUIT COMPLETE CTC169BT,BW,PA,PD, PE,PT,PW
C8101	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C8102	174423	2861146-35Z	CAPCC .01UF K X7R 50V (.12x.06) (SEE NOTE@)
C8102	215555	XX40432-770	CAPCC .01UF K X7R 50V (.08x.05) (SEE NOTE@)
C8121	194366	1C30231-10A	CAP LYTC 100UF M 25V
C8122	174412	2861143-64A	CAPCC 100PF J NPO 50V
C8123	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C8124	190552	2861147-65Z	CAPCC .1UF K X7R 50V

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
C8125	193340	1C18401-10A	CAPCC 100PF J NPO 50V
C8126	193340	1C18401-10A	CAPCC 100PF J NPO 50V (SEE NOTE@)
C8126	197606	1C18783-33A	CAPCC .033UF Z Y5V 50V (SEE NOTE@)
C8127	193340	1C18401-10A	CAPCC 100PF J NPO 50V
C8128	193340	1C18401-10A	CAPCC 100PF J NPO 50V
C8129	193340	1C18401-10A	CAPCC 100PF J NPO 50V
C8130	193340	1C18401-10A	CAPCC 100PF J NPO 50V
C8138	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
C8201	189981	1C30250-10A	CAP LYTC 10UF M 50V
C8202	189981	1C30250-10A	CAP LYTC 10UF M 50V
C8203	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C8204	189981	1C30250-10A	CAP LYTC 10UF M 50V
C8205	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C8206	189981	1C30250-10A	CAP LYTC 10UF M 50V
C8207	146256	2821726-141	CAP LYTC 10UF M 25V (SEE NOTE@)
C8207	193580	2821726-541	CAP LYTC 47UF M 25V (SEE NOTE@)
C8208	202904	1C18501-56A	CAPCC 560PF K NPO 50V
C8209	202905	1C18400-39A	CAPCC 39PF J NPO 50V
C8210	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C8211	174423	2861146-35Z	CAPCC .01UF K X7R 50V (.12x.06) (SEE NOTE@)
C8211	215555	XX40432-770	CAPCC .01UF K X7R 50V (.08x.05) (SEE NOTE@)
C8212	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C8213	197597	1C18401-27A	CAPCC 270PF J NPO 50V
C8214	189981	2821726-141	CAP LYTC 10UF M 25V
C8215	174423	2861146-35Z	CAPCC .01UF K X7R 50V (.12x.06) (SEE NOTE@)
C8215	215555	XX40432-770	CAPCC .01UF K X7R 50V (.08x.05) (SEE NOTE@)
C8216	189981	2821726-141	CAP LYTC 10UF M 25V
C8217	174412	2861143-64A	CAPCC 100PF J NPO 50V
C8218	202906	2861141-72A	CAPCC 5PF D NPO 50V
C8219	193340	1C18401-10A	CAPCC 100PF J NPO 50V
C8220	193340	1C18401-10A	CAPCC 100PF J NPO 50V
C8221	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C8222	193340	1C18401-10A	CAPCC 100PF J NPO 50V
C8223	193340	1C18401-10A	CAPCC 100PF J NPO 50V
C8224	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C8225	174423	2861146-35Z	CAPCC .01UF K X7R 50V (.12x.06) (SEE NOTE@)
C8225	215555	XX40432-770	CAPCC .01UF K X7R 50V (.08x.05) (SEE NOTE@)
C8226	174423	2861146-35Z	CAPCC .01UF K X7R 50V (.12x.06) (SEE NOTE@)
C8226	215555	XX40432-770	CAPCC .01UF K X7R 50V (.08x.05) (SEE NOTE@)
C8227	174423	2861146-35Z	CAPCC .01UF K X7R 50V (.12x.06) (SEE NOTE@)
C8227	215555	XX40432-770	CAPCC .01UF K X7R 50V (.08x.05) (SEE NOTE@)
C8228	196641	2821725-161	CAP LYTC 1UF M 50V CTC169BM,HM,PH
C8228	189981	2821726-141	CAP LYTC 10UF M 25V CTC169BT,BW,PT,PW
C8229	174423	2861146-35Z	CAPCC .01UF K X7R 50V (.12x.06) (SEE NOTE@)
C8229	215555	XX40432-770	CAPCC .01UF K X7R 50V (.08x.05) (SEE NOTE@)
C8230	202906	2861141-72A	CAPCC 5PF D NPO 50V CTC169BM,HM (SEE NOTE@)
C8230	181090	2861143-14A	CAPCC 39PF J NPO 50V (SEE NOTE@) CTC169BM,HM,PH
C8230	181455	2861142-65A	CAPCC 18PF K NPO 50V CTC169BT,BW,PA,PD, PE,PT,PW
C8233	202906	2861141-72A	CAPCC 5PF D NPO 50V
C8236	174423	2861146-35Z	CAPCC .01UF K X7R 50V (.12x.06) (SEE NOTE@)
C8236	215555	XX40432-770	CAPCC .01UF K X7R 50V (.08x.05) (SEE NOTE@)
C8238	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C8239	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C8240	174402	2861142-33A	CAPCC 10PF F NPO 50V
C8241	202904	1C18501-56A	CAPCC 560PF K NPO 50V
C8242	193340	1C18401-10A	CAPCC 100PF J NPO 50V
C8244	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C8301	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C8302	197599	1C30259-10A	CAP LYTC 1UF M 50V
C8303	189981	1C30250-10A	CAP LYTC 10UF M 50V (SEE NOTE@)
C8303	193043	1C30250-47A	CAP LYTC 47UF M 50V (SEE NOTE@)
C8304	197599	1C30259-10A	CAP LYTC 1UF M 50V
C8305	197600	1C18572-10A	CAPCC 1000PF K X7R 50V
C8306	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C8307	197601	1C18573-22A	CAPCC .022UF K X7R 50V
C8308	200139	2861144-64A	CAPCC 560PF J NPO 50V
C8309	197600	1C18572-10A	CAPCC 1000PF K X7R 50V
C8310	197596	1C18401-11A	CAPCC 110PF J NPO 50V
C8311	193917	1C18200-05A	CAPCC 5PF D NPO 50V
C8313	197600	1C18572-10A	CAPCC 1000PF K X7R 50V
C8314	200139	2861144-64A	CAPCC 560PF J NPO 50V
C8315	197599	1C30259-10A	CAP LYTC 1UF M 50V
C8316	179277	2861147-25Z	CAPCC .047UF J X7R 50V (SEE NOTE@)
C8316	190530	2821736-87S	CAPCC .33UF Z Y5V 25V (SEE NOTE@)
C8317	179277	2861147-25Z	CAPCC .047UF J X7R 50V (SEE NOTE@)
C8317	181462	2821736-67S	CAPCC .22UF Z Y5V 50V (SEE NOTE@)
C8318	189983	1C30258-47A	CAP LYTC .47UF M 50V
C8319	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C8320	197599	1C30259-10A	CAP LYTC 1UF M 50V
C8321	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C8322	193043	1C30230-47A	CAP LYTC 47UF M 25V
C8323	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C8324	192040	1C18501-47A	CAPCC 470PF K NPO 50V
C8325	197602	1C18300-10A	CAPCC 10PF F NPO 50V CTC169BM,HM,PH (SEE NOTE@)
C8325	202907	1C18400-15A	CAPCC 15PF J NPO 50V CTC169BT,BW,PA,PD, PE,PT,PW (SEE NOTE@)
C8326	197600	1C18572-10A	CAPCC 1000PF K X7R 50V
C8327	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
C8328	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C8329	138701	1474578-010	CAPMTRIM 3.58MHZ ADJ
C8330	197603	1C18300-07A	CAPCC 7PF F NPO 50V (SEE NOTE@)
C8330			CAPCC PART OF Y8301 CRYSTAL KIT (SEE NOTE@)
C8401	197597	1C18401-27A	CAPCC 270PF J NPO 50V CTC169BM,HM,PH
C8401	205227	1C18401-33A	CAPCC 330PF J NPO 50V CTC169BT,BW,PT,PW
C8402	174423	2861146-35Z	CAPCC .01UF K X7R 50V (.12x.06) (SEE NOTE@)
C8402	215555	XX40432-770	CAPCC .01UF K X7R 50V (.08x.05) (SEE NOTE@)
C8403	138701	1474578-010	CAPMTRIM 3.58MHZ ADJ
C8404	161099	2841251-37A	CAPCD 10PF D NPO 50V
C8405	146833	2841251-93A	CAPCD 33PF J NPO 50V
C8406	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C8408	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C8409	197601	1C18573-22A	CAPCC .022UF K X7R 50V (SEE NOTE@)
C8409	190551	2861146-75Z	CAPCC .022UF K X7R 50V (SEE NOTE@)
C8410	196641	2821725-161	CAP LYTC 1UF M 50V
C8411	197601	1C18573-22A	CAPCC .022UF K X7R 50V (SEE NOTE@)
C8411	190551	2861146-75Z	CAPCC .022UF K X7R 50V (SEE NOTE@)
C8412	174423	2861146-35Z	CAPCC .01UF K X7R 50V (.12x.06) (SEE NOTE@)
C8402	215555	XX40432-770	CAPCC .01UF K X7R 50V (.08x.05) (SEE NOTE@)
C8413	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C8414	196641	2821725-161	CAP LYTC 1UF M 50V
C8415	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C8416	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C8417	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C8419	202907	1C18400-15A	CAPCC 15PF J NPO 50V CTC169BM,HM,PH

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
C8419	197604	1C18400-27A	CAPCC 27PF J NPO 50V CTC169BT,BW,PA,PD, PE,PT,PW
C8421	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C8422	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C8424	189982	1C30250-15A	CAP LYTC 15UF M 50V
C8425	189982	1C30250-15A	CAP LYTC 15UF M 50V
C8426	189982	1C30250-15A	CAP LYTC 15UF M 50V
C8427	197605	2861144-94M	CAPCC 1000PF J SL 50V
C8428	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C8429	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C8430	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C8431	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C8432	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C8433	174423	2861146-35Z	CAPCC .01UF K X7R 50V (.12x.06) (SEE NOTE@)
C8433	215555	XX40432-770	CAPCC .01UF K X7R 50V (.08x.05) (SEE NOTE@)
C8434	189981	2821726-141	CAP LYTC 10UF M 25V
C8435	189981	2821726-141	CAP LYTC 10UF M 25V
C8438	181084	2861144-24A	CAPCC 270PF J NPO 50V
C8439	178188	2861144-14A	CAPCC 220PF J NPO 50V
C8440	202908	1C18572-39A	CAPCC 3900PF K X7R 50V
C8441	197600	1C18572-10A	CAPCC 1000PF K X7R 50V
C8442	197608	1C18572-82A	CAPCC 8200PF K X7R 50V CTC169BM,HM,PH
C8442	205230	1C18572-47A	CAPCC 4700PF K X7R 50V CTC169BT,BW,PA,PD, PE,PT,PW
C8443	197609	1C18572-15A	CAPCC 1500PF K X7R 50V (SEE NOTE@)
C8443	202908	1C18572-39A	CAPCC 3900PF K X7R 50V (SEE NOTE@)
C8501	189982	1C30250-15A	CAP LYTC 15UF M 50V
C8502	193340	1C18401-10A	CAPCC 100PF J NPO 50V
C8503	197606	1C18783-33A	CAPCC .033UF Z Y5V 50V
C8504	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C8505	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C8506	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C8507	193340	1C18401-10A	CAPCC 100PF J NPO 50V
C8508	181093	1447121-014	CAP POLY 8200PF J 50V
C8509	181100	2861144-34A	CAPCC 330PF J NPO 50V
C8510	194366	1C30231-10A	CAP LYTC 100UF M 25V
C8511	197607	1C18572-22A	CAPCC 2200PF K X7R 50V
C8512	197608	1C18572-82A	CAPCC 8200PF K X7R 50V
C8513	197608	1C18572-82A	CAPCC 8200PF K X7R 50V
C8514	202904	1C18501-56A	CAPCC 560PF K NPO 50V
C8515	197609	1C18572-15A	CAPCC 1500PF K X7R 50V
C8516	174627	2861146-95Z	CAPCC 33000PF K 50V
C8517	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C8518	189981	1C30250-10A	CAP LYTC 10UF M 50V
C8519	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C8520	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C8522	174423	2861146-35Z	CAPCC .01UF K X7R 50V (.12x.06) (SEE NOTE@)
C8522	215555	XX40432-770	CAPCC .01UF K X7R 50V (.08x.05) (SEE NOTE@)
C8523	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C8524	197600	1C18572-10A	CAPCC 1000PF K X7R 50V
C8525	181091	2861143-84A	CAPCC 150PF J NPO 50V
C8526	181100	2861144-34A	CAPCC 330PF J NPO 50V
C8527	190530	2821736-87S	CAPCC .33UF Z Y5V 25V
C8528	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C8529	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C8530	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C8531	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C8532	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C8533	195922	1C18501-33A	CAPCC 330PF K NPO 50V
C8535	174423	2861146-35Z	CAPCC .01UF K X7R 50V (.12x.06) (SEE NOTE@)
C8535	215555	XX40432-770	CAPCC .01UF K X7R 50V (.08x.05) (SEE NOTE@)
C8536	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C8537	195689	1C18573-10A	CAPCC .01UF K X7R 50V
C8538	190552	2861147-65Z	CAPCC .1UF K X7R 50V (SEE NOTE@)
C8538	190530	2821736-87S	CAPCC .33UF Z Y5V 25V (SEE NOTE@)
C8539	190552	2861147-65Z	CAPCC .1UF K X7R 50V (SEE NOTE@)
C8539	190530	2821736-87S	CAPCC .33UF Z Y5V 25V (SEE NOTE@)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
C8540	181100	2861144-34A	CAPCC 330PF J NPO 50V
C8541	181100	2861144-34A	CAPCC 330PF J NPO 50V
C8542	193036	2861144-55Z	CAPCC 470PF K X7R 50V
C8543	202909	1C18572-18A	CAPCC 1800PF K X7R 50V
C8544	174409	2861143-24A	CAPCC 47PF J NPO 50V
CR8201	164874	1471872-010	DIODE
CR8413	164874	1471872-010	DIODE
CR8501	160521	1477949-007	DIODE
CR8502	160521	1477949-007	DIODE
CR8503	164874	1471872-010	DIODE
CR8504	164874	1471872-010	DIODE
DL8201	190007	2821743-002	DELAY LINE CTC169BM,HM,PH
DL8201	207841	2821743-04A	DELAY LINE CTC169BT,BW,PA,PD, PE,PT,PW
FB8101	154052	2843165-001	BEAD
FB8501	154052	2843165-001	BEAD
FB8502	154052	2843165-001	BEAD
J8001	200160	XX10005-030	CONNECTOR 10 PIN DATA
J8002	202910	XX10004-990	CONNECTOR 7 PIN VIDEO CTC169BM,HM,PH
J8002	201135	XX10004-970	CONNECTOR 5 PIN VIDEO CTC169BT,BW,PA,PD, PE,PT,PW
J8003	201134	XX10005-010	CONNECTOR 8 PIN LUM/CHR
JC101	192065	1B14229-00A	RES CMF 1/10W 10% .05R CTC169BM,HM,PH
JC101	205408	XX80440-510	RES CMF 1/10W 10% .0R CTC169BT,BW,PT,PW
JC115	181161	93697-005	RES CMF 1/8W 5% .05R
JC116	181161	93697-005	RES CMF 1/8W 5% .05R
JC117	192065	1B14229-00A	RES CMF 1/10W 10% .05R CTC169BM,HM,PH
JC117	205408	XX80440-510	RES CMF 1/10W 10% .0R CTC169BT,BW,PA,PD, PE,PT,PW
JC118	192065	1B14229-00A	RES CMF 1/10W 10% .05R CTC169BM,HM,PH
JC118	205408	XX80440-510	RES CMF 1/10W 10% .0R CTC169BT,BW,PA,PD, PE,PT,PW
JC201	192065	1B14229-00A	RES CMF 1/10W 10% .05R CTC169BM,HM,PH
JC201	205408	XX80440-510	RES CMF 1/10W 10% .0R CTC169BT,BW,PA,PD, PE,PT,PW
JC202	192065	1B14229-00A	RES CMF 1/10W 10% .05R CTC169BM,HM,PH
JC202	205408	XX80440-510	RES CMF 1/10W 10% .0R CTC169BT,BW,PA,PD, PE,PT,PW
JC206	192065	1B14229-00A	RES CMF 1/10W 10% .05R CTC169BM,HM,PH
JC206	205408	XX80440-510	RES CMF 1/10W 10% .0R CTC169BT,BW,PA,PD, PE,PT,PW
JC207	192065	1B14229-00A	RES CMF 1/10W 10% .05R CTC169BM,HM,PH
JC207	205408	XX80440-510	RES CMF 1/10W 10% .0R CTC169BT,BW,PA,PD, PE,PT,PW
JC208	192065	1B14229-00A	RES CMF 1/10W 10% .05R CTC169BM,HM,PH
JC208	205408	XX80440-510	RES CMF 1/10W 10% .0R CTC169BT,BW,PA,PD, PE,PT,PW
JC209	181161	93697-005	RES CMF 1/8W 5% .05R
JC210	192065	1B14229-00A	RES CMF 1/10W 10% .05R CTC169BM,HM,PH
JC210	205408	XX80440-510	RES CMF 1/10W 10% .0R CTC169BT,BW,PA,PD, PE,PT,PW
JC211	181161	93697-005	RES CMF 1/8W 5% .05R
JC212	192065	1B14229-00A	RES CMF 1/10W 10% .05R CTC169BM,HM,PH

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
JC213	205408	XX80440-510	RES CMF 1/10W 10% .0R CTC169BT,BW,PA,PD, PE,PT,PW
JC213	181161	93697-005	RES CMF 1/8W 5% .05R
JC214	181161	93697-005	RES CMF 1/8W 5% .05R
JC215	181161	93697-005	RES CMF 1/8W 5% .05R
JC216	192065	1B14229-00A	RES CMF 1/10W 10% .05R CTC169BM,HM,PH
JC216	205408	XX80440-510	RES CMF 1/10W 10% .0R CTC169BT,BW,PA,PD, PE,PT,PW
JC217	181161	93697-005	RES CMF 1/8W 5% .05R
JC218	181161	93697-005	RES CMF 1/8W 5% .05R
JC219	181161	93697-005	RES CMF 1/8W 5% .05R
JC220	192065	1B14229-00A	RES CMF 1/10W 10% .05R CTC169BM,HM,PH
JC220	205408	XX80440-510	RES CMF 1/10W 10% .0R CTC169BT,BW,PA,PD, PE,PT,PW
JC221	192065	1B14229-00A	RES CMF 1/10W 10% .05R CTC169BM,HM,PH
JC221	205408	XX80440-510	RES CMF 1/10W 10% .0R CTC169BT,BW,PA,PD, PE,PT,PW
JC301	181161	93697-005	RES CMF 1/8W 5% .05R
JC302	181161	93697-005	RES CMF 1/8W 5% .05R
JC303	181161	93697-005	RES CMF 1/8W 5% .05R
JC304	181161	93697-005	RES CMF 1/8W 5% .05R
JC305	192065	1B14229-00A	RES CMF 1/10W 10% .05R CTC169BM,HM,PH
JC305	205408	XX80440-510	RES CMF 1/10W 10% .0R CTC169BT,BW,PA,PD, PE,PT,PW
JC401	192065	1B14229-00A	RES CMF 1/10W 10% .05R CTC169BM,HM,PH
JC401	205408	XX80440-510	RES CMF 1/10W 10% .0R CTC169BT,BW,PA,PD, PE,PT,PW
JC402	181161	93697-005	RES CMF 1/8W 5% .05R
JC403	192065	1B14229-00A	RES CMF 1/10W 10% .05R CTC169BM,HM,PH
JC403	205408	XX80440-510	RES CMF 1/10W 10% .0R CTC169BT,BW,PA,PD, PE,PT,PW
JC404	181161	93697-005	RES CMF 1/8W 5% .05R
JC405	181161	93697-005	RES CMF 1/8W 5% .05R
JC406	192065	1B14229-00A	RES CMF 1/10W 10% .05R CTC169BM,HM,PH
JC406	205408	XX80440-510	RES CMF 1/10W 10% .0R CTC169BT,BW,PA,PD, PE,PT,PW
JC407	192065	1B14229-00A	RES CMF 1/10W 10% .05R CTC169BM,HM,PH
JC407	205408	XX80440-510	RES CMF 1/10W 10% .0R CTC169BT,BW,PA,PD, PE,PT,PW
JC408	192065	1B14229-00A	RES CMF 1/10W 10% .05R CTC169BM,HM,PH
JC408	205408	XX80440-510	RES CMF 1/10W 10% .0R CTC169BT,BW,PA,PD, PE,PT,PW
JC409	181161	93697-005	RES CMF 1/8W 5% .05R
JC410	192065	1B14229-00A	RES CMF 1/10W 10% .05R CTC169BM,HM,PH
JC410	205408	XX80440-510	RES CMF 1/10W 10% .0R CTC169BT,BW,PA,PD, PE,PT,PW
JC411	181161	93697-005	RES CMF 1/8W 5% .05R
JC413	181161	93697-005	RES CMF 1/8W 5% .05R
JC414	181161	93697-005	RES CMF 1/8W 5% .05R
JC415	192065	1B14229-00A	RES CMF 1/10W 10% .05R CTC169BM,HM,PH
JC415	205408	XX80440-510	RES CMF 1/10W 10% .0R CTC169BT,BW,PA,PD, PE,PT,PW
JC501	181161	93697-005	RES CMF 1/8W 5% .05R
JC502	181161	93697-005	RES CMF 1/8W 5% .05R
JC503	192065	1B14229-00A	RES CMF 1/10W 10% .05R CTC169BM,HM,PH
JC503	205408	XX80440-510	RES CMF 1/10W 10% .0R CTC169BT,BW,PA,PD, PE,PT,PW

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
JC504	181161	93697-005	RES CMF 1/8W 5% .05R
JC505	181161	93697-005	RES CMF 1/8W 5% .05R
JC507	192065	1B14229-00A	RES CMF 1/10W 10% .05R CTC169BM,HM,PH
JC507	205408	XX80440-510	RES CMF 1/10W 10% .0R CTC169BT,BW,PA,PD, PE,PT,PW
JC508	192065	1B14229-00A	RES CMF 1/10W 10% .05R CTC169BM,HM,PH
JC508	205408	XX80440-510	RES CMF 1/10W 10% .0R CTC169BT,BW,PA,PD, PE,PT,PW
JC509	181161	93697-005	RES CMF 1/8W 5% .05R
JM8900		2F35033-502	SEE SPIP MICRO SIP (USED ON 2F43005-501)
JM8900		2F35033-501	SEE SPIP MICRO SIP (USED ON 2F43005-509, 511)
L8101	156370	2872884-042	COIL 10UH .41 LG (SEE NOTE@)
L8101	204486	XX80407-095	COIL 10UH .26 LG (SEE NOTE@)
L8102	156370	2872884-042	COIL 10UH .41 LG (SEE NOTE@)
L8102	204486	XX80407-095	COIL 10UH .26 LG (SEE NOTE@)
L8201	195713	1C51100-47A	COIL 47UH
L8202	196107	1C51100-56A	COIL 56UH
L8203	197614	1C51109-47A	COIL 4.7UH
L8204	195712	1C51100-22A	COIL 22UH
L8205	195712	1C51100-22A	COIL 22UH
L8206	195712	1C51100-22A	COIL 22UH
L8207	195712	1C51100-22A	COIL 22UH
L8301	189987	1C51101-15A	COIL
L8302	189987	1C51101-15A	COIL
L8303	197614	1C51109-47A	COIL 4.7UH
L8401	202912	1C51101-68A	COIL
L8501	160145	2871333-008	COIL 200UH (SEE NOTE@)
L8501	214573	1C55100-10A	COIL (SEE NOTE@)
L8502	202913	1C51109-27A	COIL
L8503	156370	2872884-042	COIL 10UH .41 LG (SEE NOTE@)
L8503	204486	XX80407-095	COIL 10UH .26 LG (SEE NOTE@)
Q8101	179740	1417500-001	TRANSISTOR VERT BUFFER
Q8102	179740	1417500-001	TRANSISTOR VERT DRIVE
Q8110	179740	1417500-001	TRANSISTOR BLK STR DIS
Q8111	179741	1417501-001	TRANSISTOR F SWITCH
Q8201	179740	1417500-001	TRANSISTOR MAIN PIX SEL
Q8202	179740	1417500-001	TRANSISTOR INSERT PIX SELECT
Q8203	179740	1417500-001	TRANSISTOR VIDEO BUFFER
Q8204	179740	1417500-001	TRANSISTOR VIDEO BUFFER
Q8205	179740	1417500-001	TRANSISTOR DECODE SEL
Q8206	179740	1417500-001	TRANSISTOR CHROMA BUF
Q8207	179741	1417501-001	TRANSISTOR CHROMA AMP
Q8208	179741	1417501-001	TRANSISTOR CHROMA BUF
Q8209	179741	1417501-001	TRANSISTOR LUMA AMP
Q8210	179741	1417501-001	TRANSISTOR CHROMA BUF
Q8211	179740	1417500-001	TRANSISTOR LUMA AMP
Q8212	179741	1417501-001	TRANSISTOR LUMA AMP
Q8213	179740	1417500-001	TRANSISTOR CHROMA AMP
Q8214	179741	1417501-001	TRANSISTOR CHROMA AMP
Q8219	179740	1417500-001	TRANSISTOR CHROMA ATTEN
Q8220	179741	1417501-001	TRANSISTOR LUMA BUFFER
Q8221	179740	1417500-001	TRANSISTOR LUMA AMP
Q8301	179740	1417500-001	TRANSISTOR DECODE SELECT SWITCH
Q8302	179740	1417500-001	TRANSISTOR V AMP (B-Y)
Q8303	179740	1417500-001	TRANSISTOR DECODE SELECT SWITCH
Q8304	179740	1417500-001	TRANSISTOR U AMP (R-Y)
Q8305	179740	1417500-001	TRANSISTOR LUMA AMP
Q8306	179741	1417501-001	TRANSISTOR LUMA AMP
Q8401	179740	1417500-001	TRANSISTOR FREE RUN SW
Q8402	179740	1417500-001	TRANSISTOR SYNC SEP
Q8403	179740	1417500-001	TRANSISTOR BURST GATE
Q8404	179740	1417500-001	TRANSISTOR BLK CLAMP
Q8405	179740	1417500-001	TRANSISTOR FREE RUN SW

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
Q8407	179740	1417500-001	TRANSISTOR LUMA BUFFER (SEE NOTE@)
Q8407	179741	1417501-001	TRANSISTOR LUMA BUFFER (SEE NOTE@)
Q8407	215496	XX30946-660	TRANSISTOR LUMA BUFFER (SEE NOTE@)
Q8408	179740	1417500-001	TRANSISTOR U/V BUFFER
Q8409	179740	1417500-001	TRANSISTOR U/V AMP
Q8410	179741	1417501-001	TRANSISTOR XTAL BUFFER
Q8411	179741	1417501-001	TRANSISTOR LUMA AMP
Q8412	179740	1417500-001	TRANSISTOR LUMA AMP
Q8501	179740	1417500-001	TRANSISTOR SYNC AMP
Q8502	181476	1417554-001	TRANSISTOR OSCILLATOR
Q8503	179740	1417500-001	TRANSISTOR ERROR AMP
Q8504	179740	1417500-001	TRANSISTOR ERROR DETECT
Q8505	179741	1417501-001	TRANSISTOR CHROMA AMP
Q8506	179740	1417500-001	TRANSISTOR VOLT/CURRENT CONVERTER
Q8507	179740	1417500-001	TRANSISTOR SWITCH
Q8508	179740	1417500-001	TRANSISTOR BIAS
Q8509	179740	1417500-001	TRANSISTOR BIAS
Q8510	179740	1417500-001	TRANSISTOR SYNC BUFFER
Q8511	179740	1417500-001	TRANSISTOR INVERTER
Q8512	179740	1417500-001	TRANSISTOR INVERTER
Q8513	179740	1417500-001	TRANSISTOR HORIZ BUFFER
R8101	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R8102	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8103	174348	93697-397	RES CMF 1/8W 5% 1K
R8104	174348	93697-397	RES CMF 1/8W 5% 1K
R8105	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8106	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8107	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8108	192091	1B14212-20A	RES CMF 1/10W 5% 2K
R8109	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8110	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8150	174348	93697-397	RES CMF 1/8W 5% 1K
R8151	180369	93697-404	RES CMF 1/8W 5% 2K
R8152	197633	1B14213-47A	RES CMF 1/10W 5% 47K
R8201	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R8202	174367	93697-429	RES CMF 1/8W 5% 22K
R8203	176818	93697-373	RES CMF 1/8W 5% 100R
R8204	218508	1B14211-10A	RES CMF 1/10W 5% 100R
R8205	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R8206	174367	93697-429	RES CMF 1/8W 5% 22K
R8207	176818	93697-373	RES CMF 1/8W 5% 100R
R8208	218508	1B14211-10A	RES CMF 1/10W 5% 100R
R8209	174340	93697-357	RES CMF 1/8W 5% 22R
R8210	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8211	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R8212	192098	1B14210-47A	RES CMF 1/10W 5% 47R
R8213	218508	1B14211-10A	RES CMF 1/10W 5% 100R
R8214	192104	1B14211-39A	RES CMF 1/10W 5% 390R
R8215	192080	1B14210-22A	RES CMF 1/10W 5% 22R
R8216	174348	93697-397	RES CMF 1/8W 5% 1K
R8217	176818	93697-373	RES CMF 1/8W 5% 100R
R8218	162001	93697-401	RES CMF 1/8W 5% 1.5K (SEE NOTE@)
R8218	181056	93697-394	RES CMF 1/8W 5% 750R (SEE NOTE@)
R8219	181050	93697-386	RES CMF 1/8W 5% 360R
R8220	175325	2819434-373	RES CF 1/4W 5% 100R CTC169BM,BT,HM,PH (SEE NOTE@)
R8220	175412	2819434-389	RES CF 1/4W 5% 470R CTC169BT,BW,PA,PD, PE,PT,PW (SEE NOTE@)
R8221	192081	1B14212-27A	RES CMF 1/10W 5% 2.7K
R8222	174364	93697-421	RES CMF 1/8W 5% 10K
R8223	197470	1B14213-20A	RES CMF 1/10W 5% 20K
R8224	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R8225	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8226	192100	1B14212-10A	RES CMF 1/10W 5% 1K CTC169BM,HM,PH
R8226	195939	1B14201-68A	RES CMF 1/10W 2% 680R CTC169BT,BW,PA,PD, PE,PT,PW
R8227	218508	1B14211-10A	RES CMF 1/10W 5% 100R
R8228	192100	1B14212-10A	RES CMF 1/10W 5% 1K CTC169BM,HM,PH
R8228	194926	1B14201-47A	RES CMF 1/10W 2% 470R CTC169BT,BW(SEE NOTE@)
R8228	192065	1B14229-00A	RES CMF 1/10W 10% .05R CTC169BT,BW,PT,PW (SEE NOTE@)
R8228	205408	XX80440-510	RES CMF 1/10W 10% .0R CTC169BT,BW,PA,PD, PE,PT,PW (SEE NOTE@)
R8229	192080	1B14210-22A	RES CMF 1/10W 5% 22R
R8230	202585	1B14201-51A	RES CMF 1/10W 2% 510R
R8231	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R8232	192091	1B14212-20A	RES CMF 1/10W 5% 2K
R8233	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8234	218508	1B14211-10A	RES CMF 1/10W 5% 100R
R8235	195939	1B14201-68A	RES CMF 1/10W 2% 680R
R8236	195939	1B14201-68A	RES CMF 1/10W 2% 680R
R8237	192091	1B14212-20A	RES CMF 1/10W 5% 2K
R8238	176367	93697-365	RES CMF 1/8W 5% 47R
R8239	202914	1B14201-75A	RES CMF 1/10W 2% 750R
R8240	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R8241	192091	1B14212-20A	RES CMF 1/10W 5% 2K
R8242	192098	1B14210-47A	RES CMF 1/10W 5% 47R
R8243	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R8244	176816	93697-445	RES CMF 1/8W 5% 100K
R8245	192084	1B14214-10A	RES CMF 1/10W 5% 100K (SEE NOTE@)
R8245	200174	1B14214-20A	RES CMF 1/10W 5% 200K (SEE NOTE@)
R8246	192100	1B14212-10A	RES CMF 1/10W 5% 1K (SEE NOTE@)
R8246	192098	1B14210-47A	RES CMF 1/10W 5% 47R (SEE NOTE@)
R8247	197470	1B14213-20A	RES CMF 1/10W 5% 20K
R8248	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8249	202915	1B14201-20A	RES CMF 1/10W 2% 200R
R8250	218508	1B14211-10A	RES CMF 1/10W 5% 100R
R8251	197623	1B14201-27A	RES CMF 1/10W 2% 270R
R8252	192080	1B14210-22A	RES CMF 1/10W 5% 22R
R8253	192098	1B14210-47A	RES CMF 1/10W 5% 47R
R8255	200176	1B14213-30A	RES CMF 1/10W 5% 30K
R8256	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R8257	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8258	202915	1B14201-20A	RES CMF 1/10W 2% 200R
R8259	218508	1B14211-10A	RES CMF 1/10W 5% 100R
R8260	202915	1B14201-20A	RES CMF 1/10W 2% 200R CTC169BM,HM,PH
R8260	192098	1B14210-47A	RES CMF 1/10W 5% 47R CTC169BT (SEE NOTE@)
R8260	192080	1B14210-22A	RES CMF 1/10W 5% 22R CTC169BT,BW,PA,PD, PE,PT,PW (SEE NOTE@)
R8261	192080	1B14210-22A	RES CMF 1/10W 5% 22R
R8270	218508	1B14211-10A	RES CMF 1/10W 5% 100R CTC169BM,HM,PH
R8270	192098	1B14210-47A	RES CMF 1/10W 5% 47R CTC169BT,BW,PA,PD, PE,PT,PW
R8271	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8277	176818	93697-373	RES CMF 1/8W 5% 100R
R8278	218508	1B14211-10A	RES CMF 1/10W 5% 100R
R8279	218508	1B14211-10A	RES CMF 1/10W 5% 100R
R8281	192097	1B14212-47A	RES CMF 1/10W 5% 4.7K
R8284	174348	93697-397	RES CMF 1/8W 5% 1K
R8285	176793	2819435-389	RES CF 1/2W 5% 470R
R8303	197468	1B14214-47A	RES CMF 1/10W 5% 470K
R8304	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R8305	190462	93697-697	RES CMF 1/8W 2% 1K (SEE NOTE@)
R8305	176814	93697-695	RES CMF 1/8W 2% 820R (SEE NOTE@)
R8306	190462	93697-697	RES CMF 1/8W 2% 1K (SEE NOTE@)
R8306	181080	93697-709	RES CMF 1/8W 2% 3.3K (SEE NOTE@)
R8307	190526	2821716-503	RES CONTROL TINT
R8308	197633	1B14213-47A	RES CMF 1/10W 5% 47K (SEE NOTE@)
R8308	205375	1B14214-27A	RES CMF 1/10W 5% 270K (SEE NOTE@)
R8310	197476	1B14212-16A	RES CMF 1/10W 5% 1.6K
R8311	162003	93697-393	RES CMF 1/8W 5% 680R
R8312	192070	1B14213-22A	RES CMF 1/10W 5% 22K
R8313	174345	93697-387	RES CMF 1/8W 5% 390R

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R8314	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8315	162003	93697-393	RES CMF 1/8W 5% 680R
R8316	192070	1B14213-22A	RES CMF 1/10W 5% 22K
R8317	174345	93697-387	RES CMF 1/8W 5% 390R
R8318	192096	1B14212-22A	RES CMF 1/10W 5% 2.2K
R8319	197906	1B14203-82A	RES CMF 1/10W 2% 82K CTC169BM,HM,PH
R8319	205370	1B14204-12A	RES CMF 1/10W 2% 120K CTC169BT,BW,PA,PD, PE,PT,PW
R8320	192082	1B14212-15A	RES CMF 1/10W 5% 1.5K CTC169BM,HM,PH
R8320	197907	1B14212-39A	RES CMF 1/10W 5% 3.9K CTC169BT,BW,PA,PD, PE,PT,PW
R8321	197634	1B14213-24A	RES CMF 1/10W 5% 24K
R8322	181494	93697-443	RES CMF 1/8W 5% 82K
R8323	205245	1B14213-27A	RES CMF 1/10W 5% 27K
R8324	190526	2821716-503	RES CONTROL SATURATION
R8326	190526	2821716-503	RES CONTROL BURST PHASE
R8327	197635	1B14213-36A	RES CMF 1/10W 5% 36K
R8328	181488	93697-385	RES CMF 1/8W 2% 330R (SEE NOTE@)
R8328	181491	93697-379	RES CMF 1/8W 5% 180R (SEE NOTE@)
R8329	192075	1B14210-51A	RES CMF 1/10W 5% 51R
R8330	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8331	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8332	194926	1B14201-47A	RES CMF 1/10W 2% 470R (SEE NOTE@)
R8332	197638	1B14202-10A	RES CMF 1/10W 2% 1K (SEE NOTE@)
R8333	192080	1B14210-22A	RES CMF 1/10W 5% 22R
R8334	218508	1B14211-10A	RES CMF 1/10W 5% 100R
R8336	181106	2821716-102	RES CONTROL PIP GAIN (SEE NOTE@)
R8336	181112	2821716-501	RES CONTROL PIP GAIN (SEE NOTE@)
R8337	194920	1B14212-12A	RES CMF 1/10W 5% 1.2K
R8338	205375	1B14214-27A	RES CMF 1/10W 5% 270K (SEE NOTE@)
R8338	197640	1B14214-15A	RES CMF 1/10W 5% 150K (SEE NOTE@)
R8348	175055	2819434-397	RES CF 1/4W 5% 1K
R8401	174350	93697-413	RES CMF 1/8W 5% 4.7K
R8402	176366	93697-405	RES CMF 1/8W 5% 2.2K CTC169BM,HM,PH
R8402	174348	93697-397	RES CMF 1/8W 5% 1K CTC169BT,BW,PA,PD, PE,PT,PW
R8403	176813	93697-433	RES CMF 1/8W 5% 33K
R8404	176366	93697-405	RES CMF 1/8W 5% 2.2K
R8405	197907	1B14212-39A	RES CMF 1/10W 5% 3.9K
R8406	192100	1B14212-10A	RES CMF 1/10W 5% 1K CTC169BM,HM,PH
R8406	192091	1B14212-20A	RES CMF 1/10W 5% 2K CTC169BT,BW,PA,PD, PE,PT,PW
R8408	176366	93697-405	RES CMF 1/8W 5% 2.2K
R8409	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R8410	155007	93697-399	RES CMF 1/8W 5% 1.2K
R8411	194920	1B14212-12A	RES CMF 1/10W 5% 1.2K
R8412	197637	1B14211-68A	RES CMF 1/10W 5% 680R
R8413	180325	93697-428	RES CMF 1/8W 5% 20K CTC169BM,HM,PH (SEE NOTE@)
R8413	176816	93697-445	RES CMF 1/8W 5% 100K CTC169BM,HM,PH (SEE NOTE@)
R8413	180325	93697-428	RES CMF 1/8W 5% 20K CTC169BT,BW,PA,PD, PE,PT,PW
R8414	197907	1B14212-39A	RES CMF 1/10W 5% 3.9K
R8415	181161	93697-005	RES CMF 1/8W 5% .05R
R8416	174348	93697-397	RES CMF 1/8W 5% 1K
R8417	192091	1B14212-20A	RES CMF 1/10W 5% 2K
R8418	197633	1B14213-47A	RES CMF 1/10W 5% 47K
R8419	197638	1B14202-10A	RES CMF 1/10W 2% 1K
R8420	205375	1B14214-27A	RES CMF 1/10W 5% 270K
R8421	197468	1B14214-47A	RES CMF 1/10W 5% 470K (SEE NOTE@)
R8421	192072	1B14214-33A	RES CMF 1/10W 5% 330K (SEE NOTE@)
R8422	181107	2821716-103	RES CONTROL CHROMA(R-Y)
R8423	197468	1B14214-47A	RES CMF 1/10W 5% 470K (SEE NOTE@)
R8423	192072	1B14214-33A	RES CMF 1/10W 5% 330K (SEE NOTE@)
R8424	181107	2821716-103	RES CONTROL CHROMA(B-Y)
R8425	192097	1B14212-47A	RES CMF 1/10W 5% 4.7K
R8427	192080	1B14210-22A	RES CMF 1/10W 5% 22R (SEE NOTE@)
R8427	192096	1B14212-22A	RES CMF 1/10W 5% 2.2K (SEE NOTE@)
R8428	174348	93697-397	RES CMF 1/8W 5% 1K
R8429	195942	1B14211-47A	RES CMF 1/10W 5% 470R (SEE NOTE@)
R8429	218508	1B14211-10A	RES CMF 1/10W 5% 100R (SEE NOTE@)
R8429	192100	1B14212-10A	RES CMF 1/10W 5% 1K (SEE NOTE@)
R8430	197642	1B14212-30A	RES CMF 1/10W 5% 3K
R8431	162001	93697-401	RES CMF 1/8W 5% 1.5K
R8432	192080	1B14210-22A	RES CMF 1/10W 5% 22R
R8433	197907	1B14212-39A	RES CMF 1/10W 5% 3.9K
R8434	197475	1B14212-43A	RES CMF 1/10W 5% 4.3K
R8435	205354	1B14213-15A	RES CMF 1/10W 5% 15K
R8436	197637	1B14211-68A	RES CMF 1/10W 5% 680R
R8437	192097	1B14212-47A	RES CMF 1/10W 5% 4.7K
R8438	192096	1B14212-22A	RES CMF 1/10W 5% 2.2K
R8439	197622	1B14213-51A	RES CMF 1/10W 5% 51K
R8440	193344	1B14213-33A	RES CMF 1/10W 5% 33K CTC169BM,HM,PH (SEE NOTE@)
R8440	205245	1B14213-27A	RES CMF 1/10W 5% 27K CTC169BM,HM,PH (SEE NOTE@)
R8440	205360	1B14213-33A	RES CMF 1/10W 5% 33K CTC169BT,BW,PA,PD, PE,PT,PW
R8441	174348	93697-397	RES CMF 1/8W 5% 1K
R8442	192097	1B14212-47A	RES CMF 1/10W 5% 4.7K
R8443	195942	1B14211-47A	RES CMF 1/10W 5% 470R (SEE NOTE@)
R8443	218508	1B14211-10A	RES CMF 1/10W 5% 100R (SEE NOTE@)
R8444	192082	1B14212-15A	RES CMF 1/10W 5% 1.5K
R8445	202917	1B14215-15A	RES CMF 1/10W 5% 1.5M
R8446	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8447	197633	1B14213-47A	RES CMF 1/10W 5% 47K
R8448	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8449	192097	1B14212-47A	RES CMF 1/10W 5% 4.7K
R8450	218508	1B14211-10A	RES CMF 1/10W 5% 100R
R8501	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8502	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R8503	158491	93697-361	RES CMF 1/8W 5% 33R
R8504	197639	1B14212-36A	RES CMF 1/10W 5% 3.6K
R8505	175329	2819434-426	RES CF 1/4W 5% 16K
R8506	197475	1B14212-43A	RES CMF 1/10W 5% 4.3K (SEE NOTE@)
R8506	192091	1B14212-20A	RES CMF 1/10W 5% 2K (SEE NOTE@)
R8507	197475	1B14212-43A	RES CMF 1/10W 5% 4.3K
R8508	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8509	197634	1B14213-24A	RES CMF 1/10W 5% 24K
R8510	205346	1B14212-56A	RES CMF 1/10W 5% 5.6K
R8511	197640	1B14214-15A	RES CMF 1/10W 5% 150K
R8512	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R8513	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R8514	192097	1B14212-47A	RES CMF 1/10W 5% 4.7K
R8515	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R8516	195944	1B14211-18A	RES CMF 1/10W 5% 180R
R8517	191389	2821716-203	RES CONTROL Y REF ADJ
R8518	181106	2821716-102	RES CONTROL UV REF ADJ
R8519	192091	1B14212-20A	RES CMF 1/10W 5% 2K
R8520	192082	1B14212-15A	RES CMF 1/10W 5% 1.5K
R8521	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8522	192082	1B14212-15A	RES CMF 1/10W 5% 1.5K
R8523	192082	1B14212-15A	RES CMF 1/10W 5% 1.5K
R8524	197634	1B14213-24A	RES CMF 1/10W 5% 24K
R8525	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8526	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R8527	205360	1B14213-33A	RES CMF 1/10W 5% 33K

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R8528	197642	1B14212-30A	RES CMF 1/10W 5% 3K
R8529	197634	1B14213-24A	RES CMF 1/10W 5% 24K
R8530	162003	93697-393	RES CMF 1/8W 5% 680R
R8531	162003	93697-393	RES CMF 1/8W 5% 680R
R8532	162003	93697-393	RES CMF 1/8W 5% 680R
R8533	192097	1B14212-47A	RES CMF 1/10W 5% 4.7K
R8534	197472	1B14211-56A	RES CMF 1/10W 5% 560R
R8535	197643	1B14212-91A	RES CMF 1/10W 5% 9.1K
R8536	197644	1B14211-82A	RES CMF 1/10W 5% 820R
R8537	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R8538	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R8539	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8540	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8541	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8542	174348	93697-397	RES CMF 1/8W 5% 1K
R8543	174348	93697-397	RES CMF 1/8W 5% 1K
R8544	197633	1B14213-47A	RES CMF 1/10W 5% 47K
R8546	197907	1B14202-39A	RES CMF 1/10W 2% 3.9K
R8547	197904	1B14203-20A	RES CMF 1/10W 2% 20K
R8548	218508	1B14211-10A	RES CMF 1/10W 5% 100R CTC169BM,HM,PH
R8548	192104	1B14211-39A	RES CMF 1/10W 5% 390R CTC169BT,BW,PA,PD, PE,PT,PW
R8549	197906	1B14203-82A	RES CMF 1/10W 2% 82K CTC169BM,HM,PH (SEE NOTE@)
R8549	205367	1B14203-68A	RES CMF 1/10W 2% 68K CTC169BM,BT,PT (SEE NOTE@)
R8549	205362	1B14203-39A	RES CMF 1/10W 2% 39K CTC169BT,BW,PA,PD, PE,PT,PW (SEE NOTE@)
R8550	197472	1B14211-56A	RES CMF 1/10W 5% 560R CTC169BM,BT,PT (SEE NOTE@)
R8550	192096	1B14212-22A	RES CMF 1/10W 5% 2.2K CTC169BT,BW,PA,PD, PE,PT,PW (SEE NOTE@)
R8551	218508	1B14211-10A	RES CMF 1/10W 5% 100R (SEE NOTE@)
R8551	195935	1B14210-82A	RES CMF 1/8W 5% 82R (SEE NOTE@)
R8552	197473	1B14211-51A	RES CMF 1/10W 5% 510R CTC169BM,BT,PT (SEE NOTE@)
R8552	192091	1B14212-20A	RES CMF 1/10W 5% 2K CTC169BT,BW,PA,PD, PE,PT,PW (SEE NOTE@)
R8553	192835	93697-425	RES CMF 1/8W 5% 15K
R8554	197475	1B14212-43A	RES CMF 1/10W 5% 4.3K
R8556	197905	1B14202-27A	RES CMF 1/10W 2% 2.7K (SEE NOTE@)
R8556	205348	1B14202-75A	RES CMF 1/10W 2% 7.5K (SEE NOTE@)
R8557	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R8558	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R8559	195937	1B14213-10A	RES CMF 1/10W 5% 10K
R8560	197633	1B14213-47A	RES CMF 1/10W 5% 47K
R8561	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R8562	192100	1B14212-10A	RES CMF 1/10W 5% 1K
U8201	176873	1421863-001	IC MAIN PIX SWITCH
U8202	176873	1421863-001	IC INSERT PIX SWITCH
U8203	176873	1421863-001	IC CHROMA SWITCH
U8204	176873	1421863-001	IC LUMA SWITCH
U8205	197646	1A68108-01A	IC FAST SWITCH
U8301	197647	1A51107-01A	IC DECODER
U8401	197648	1A51106-01A	IC OSCILLATOR
U8402	197649	1A51108-01A	IC ENCODER
U8501	202916	1A68100-02B	IC PIP PROCESSOR
U8502	197651	1A64101-01A	IC V RAM
U8503	159433	1421781-001	IC H/V PROCESSOR
Y8301	197652	2816766-09A	CRYSTAL 14.318180MHZ (SEE NOTE@)
Y8301	221195	XX15041-310	CRYSTAL KIT (SEE NOTE@)
Y8401	161235	2816766-002	CRYSTAL 3.58MHZ
	154397	2870460-001	WIRE SADDLE .66 HIGH

SPIP MICRO SIP CBA

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
JM8900	202911	2F35033-501	● CIRCUIT COMPLETE CTC169BM,BT,HM,PH (SEE NOTE@)
JM8900	207818	2F35033-502	● CIRCUIT COMPLETE CTC169BT,BW,PA,PD, PE,PT,PW (SEE NOTE@)
C8901	149297	2841255-50R	CAPCD .047UF Z Z5V 50V
C8902	178815	2841252-13A	CAPCD 39PF J NPO 50V
C8903	178815	2841252-13A	CAPCD 39PF J NPO 50V
C8905	145676	2841252-43A	CAPCD 68PF J NPO 50V
C8906	189981	1C30250-10A	CAP LYTC 10UF M 50V
CR8901	138974	99201-208	DIODE ZENER 4.7V .4W
L8901	204486	XX80407-095	COIL 10UH
L8902	204486	XX80407-095	COIL 10UH
Q8901	145410	1417330-011	TRANSISTOR CLOCK AMP
Q8902	146847	1417306-013	TRANSISTOR CLOCK AMP
Q8903	146847	1417306-013	TRANSISTOR VIDEO AMP
R8901	176457	2819434-469	RES CF 1/4W 5% 1M
R8902	175055	2819434-397	RES CF 1/4W 5% 1K
R8903	175055	2819434-397	RES CF 1/4W 5% 1K
R8904	175317	2819434-421	RES CF 1/4W 5% 10K
R8905	175055	2819434-397	RES CF 1/4W 5% 1K
R8906	175322	2819434-437	RES CF 1/4W 5% 47K
R8907	175055	2819434-397	RES CF 1/4W 5% 1K
R8908	175055	2819434-397	RES CF 1/4W 5% 1K
R8909	175351	2819434-728	RES CF 1/4W 2% 20K
R8910	175317	2819434-721	RES CF 1/4W 2% 10K
R8911	175351	2819434-728	RES CF 1/4W 2% 20K
R8912	175317	2819434-721	RES CF 1/4W 2% 10K
R8913	175351	2819434-728	RES CF 1/4W 2% 20K
R8914	175317	2819434-721	RES CF 1/4W 2% 10K
R8915	175351	2819434-728	RES CF 1/4W 2% 20K
R8916	175317	2819434-721	RES CF 1/4W 2% 10K
R8917	175351	2819434-728	RES CF 1/4W 2% 20K
R8918	175317	2819434-721	RES CF 1/4W 2% 10K
R8919	175351	2819434-728	RES CF 1/4W 2% 20K
R8920	175351	2819434-728	RES CF 1/4W 2% 20K
R8921	175351	2819434-428	RES CF 1/4W 5% 20K
R8922	175351	2819434-428	RES CF 1/4W 5% 20K
R8923	175317	2819434-421	RES CF 1/4W 5% 10K
R8924	175890	2819434-411	RES CF 1/4W 5% 3.9K
R8925	175055	2819434-397	RES CF 1/4W 5% 1K
R8926	175055	2819434-397	RES CF 1/4W 5% 1K
R8927	175055	2819434-397	RES CF 1/4W 5% 1K
R8928	175055	2819434-397	RES CF 1/4W 5% 1K
R8929	175055	2819434-397	RES CF 1/4W 5% 1K
R8930	175055	2819434-397	RES CF 1/4W 5% 1K
R8931	175055	2819434-397	RES CF 1/4W 5% 1K
R8932	175055	2819434-397	RES CF 1/4W 5% 1K
R8933	175055	2819434-397	RES CF 1/4W 5% 1K
R8934	175055	2819434-397	RES CF 1/4W 5% 1K
R8935	175055	2819434-397	RES CF 1/4W 5% 1K
R8936	175055	2819434-397	RES CF 1/4W 5% 1K
R8937	175055	2819434-397	RES CF 1/4W 5% 1K
R8938	176637	2819434-452	RES CF 1/4W 5% 200K
R8939	175055	2819434-397	RES CF 1/4W 5% 1K
R8940	175413	2819434-413	RES CF 1/4W 5% 4.7K
R8941	175413	2819434-413	RES CF 1/4W 5% 4.7K
R8942	175055	2819434-397	RES CF 1/4W 5% 1K
R8943	175055	2819434-397	RES CF 1/4W 5% 1K CTC169BM,HM,PH
R8943	175412	2819434-389	RES CF 1/4W 5% 470R CTC169BT,BW,PT
R8944	175044	2819434-445	RES CF 1/4W 5% 100K
U8901	204876	1A66101-02D	IC MICROPROCESSOR CTC169BM,HM,PH
U8901	207826	1A66101-03C	IC MICROPROCESSOR CTC169BT,BW,PA,PD, PE,PT,PW

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
Y8901	196028	2816766-006	CRYSTAL 8MHZ (SEE NOTE@)
Y8901	209856	2816766-13A	CRYSTAL 8MHZ (SEE NOTE@)

SRS AUDIO CBA

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	208559	2F26009-502	● CIRCUIT COMPLETE CTC169BT,PA,PE,PJ,PT
	219414	2F26009-503	● CIRCUIT COMPLETE CTC169PC,PG
C1701	189992	1C30179-47A	CAP LYTC 4.7UF M 100V
C1702	189992	1C30179-47A	CAP LYTC 4.7UF M 100V
C1703	190548	2861145-85Z	CAPCC 4700PF K X7R 50V
C1704	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C1705	189992	1C30179-47A	CAP LYTC 4.7UF M 100V
C1706	189991	1C30179-10A	CAP LYTC 1UF M 100V
C1707	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C1708	179277	2861147-25Z	CAPCC .047UF J X7R 50V
C1709	191959	1C30130-47A	CAP LYTC 47UF M 25V
C1710	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C1711	174627	2861146-95Z	CAPCC 33000PF K 50V
C1712	181085	2861145-65Z	CAPCC 3300PF K X7R 50V
C1713	190543	2861143-94A	CAPCC 180PF J NPO 50V
C1714	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C1715	175822	2861146-37R	CAPCC .012UF Z Z5U 50V
C1716	193049	2861144-85Z	CAPCC 820PF K X7R 50V
C1717	197607	1C18572-22A	CAPCC 2200PF K X7R 50V
C1718	179277	2861147-25Z	CAPCC .047UF J X7R 50V
C1719	195691	1C30179-22A	CAP LYTC 2.2UF M 100V
C1720	174421	2861145-45Z	CAPCC 2200PF K X7R 50V
C1721	189991	1C30179-10A	CAP LYTC 1UF M 100V
C1722	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C1723	189992	1C30179-47A	CAP LYTC 4.7UF M 100V
C1724	181228	2861144-15Z	CAPCC 220PF K X7R 50V
C1726	175822	2861146-37R	CAPCC .012UF Z Z5U 50V
C1728	175822	2861146-37R	CAPCC .012UF Z Z5U 50V
C1733	191959	1C30130-47A	CAP LYTC 47UF M 25V
C1734	175822	2861146-37R	CAPCC .012UF Z Z5U 50V
C1735	189991	1C30179-10A	CAP LYTC 1UF M 100V
C1736	189991	1C30179-10A	CAP LYTC 1UF M 100V
C1739	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C1740	153991	1C30130-22A	CAP LYTC 22UF M 25V
C1741	189991	1C30179-10A	CAP LYTC 1UF M 100V
C1742	207866	1C30178-33A	CAP LYTC .33UF M 100V
C1743	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C1744	189992	1C30179-47A	CAP LYTC 4.7UF M 100V
C1745	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C1746	189981	1C30150-10A	CAP LYTC 10UF M 50V
C1747	160077	1C30178-47A	CAP LYTC .47UF M 100V
C1748	189981	1C30150-10A	CAP LYTC 10UF M 50V
C1749	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C1750	189992	1C30179-47A	CAP LYTC 4.7UF M 100V
C1751	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C1752	207866	1C30178-33A	CAP LYTC .33UF M 100V
C1753	189991	1C30179-10A	CAP LYTC 1UF M 100V
C1754	189991	1C30179-10A	CAP LYTC 1UF M 100V
C1755	174627	2861146-95Z	CAPCC 33000PF K 50V
C1756	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C1757	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C1758	175822	2861146-37R	CAPCC .012UF Z Z5U 50V
C1759	153991	1C30130-22A	CAP LYTC 22UF M 25V
C1760	189992	1C30179-47A	CAP LYTC 4.7UF M 100V
C1761	193045	2861146-25Z	CAPCC 8200PF J X7R 50V
C1762	193045	2861146-25Z	CAPCC 8200PF J X7R 50V
C1763	193045	2861146-25Z	CAPCC 8200PF J X7R 50V
C1764	193045	2861146-25Z	CAPCC 8200PF J X7R 50V
C1765	193045	2861146-25Z	CAPCC 8200PF J X7R 50V
C1766	193045	2861146-25Z	CAPCC 8200PF J X7R 50V
C1767	175822	2861146-37R	CAPCC .012UF Z Z5U 50V
C1770	189992	1C30179-47A	CAP LYTC 4.7UF M 100V
C1771	189992	1C30179-47A	CAP LYTC 4.7UF M 100V
C1776	175822	2861146-37R	CAPCC .012UF Z Z5U 50V
J1701	201137	XX10004-980	CONNECTOR 6 PIN +12V
J1702	202910	XX10004-990	CONNECTOR 7 PIN IN\OUT
JC700	181161	93697-005	RES CMF 1/8W 5% .05R
JC701	181161	93697-005	RES CMF 1/8W 5% .05R
JC702	181161	93697-005	RES CMF 1/8W 5% .05R
JC704	192065	1B14229-00A	RES CMF 1/10W 10% .05R
JC705	181161	93697-005	RES CMF 1/8W 5% .05R
JC706	181161	93697-005	RES CMF 1/8W 5% .05R
JC708	181161	93697-005	RES CMF 1/8W 5% .05R
JC709	181161	93697-005	RES CMF 1/8W 5% .05R
JC712	181161	93697-005	RES CMF 1/8W 5% .05R
JC713	192065	1B14229-00A	RES CMF 1/10W 10% .05R
JC714	181161	93697-005	RES CMF 1/8W 5% .05R
JC715	192065	1B14229-00A	RES CMF 1/10W 10% .05R
JC716	181161	93697-005	RES CMF 1/8W 5% .05R
JC717	192065	1B14229-00A	RES CMF 1/10W 10% .05R
JC718	192065	1B14229-00A	RES CMF 1/10W 10% .05R
JC724	181161	93697-005	RES CMF 1/8W 5% .05R
JC725	181161	93697-005	RES CMF 1/8W 5% .05R
JC726	181161	93697-005	RES CMF 1/8W 5% .05R
JC727	181161	93697-005	RES CMF 1/8W 5% .05R
JC728	192065	1B14229-00A	RES CMF 1/10W 10% .05R
JC729	181161	93697-005	RES CMF 1/8W 5% .05R
JC731	181161	93697-005	RES CMF 1/8W 5% .05R
JC732	192065	1B14229-00A	RES CMF 1/10W 10% .05R
JC735	192065	1B14229-00A	RES CMF 1/10W 10% .05R
Q1702	179740	1417500-001	TRANSISTOR SWITCH
Q1704	179740	1417500-001	TRANSISTOR SWITCH
Q1705	179740	1417500-001	TRANSISTOR SWITCH
R1701	178281	93697-417	RES CMF 1/8W 5% 6.8K
R1705	176365	93697-420	RES CMF 1/8W 5% 9.1K
R1706	190455	93697-449	RES CMF 1/8W 5% 150K
R1708	204278	1B14225-47A	RES CMF 1/10W 10% 4.7M
R1709	204275	93697-185	RES CMF 1/8W 10% 4.7M
R1710	175360	2819434-425	RES CF 1/4W 5% 15K
R1711	175360	2819434-425	RES CF 1/4W 5% 15K
R1712	175743	93697-396	RES CMF 1/8W 5% 910R
R1713	175317	2819434-421	RES CF 1/4W 5% 10K
R1714	204275	93697-185	RES CMF 1/8W 10% 4.7M
R1715	176816	93697-445	RES CMF 1/8W 5% 100K
R1717	200176	1B14213-30A	RES CMF 1/10W 5% 30K
R1718	205363	1B14213-43A	RES CMF 1/10W 5% 43K
R1719	205244	1B14213-82A	RES CMF 1/10W 5% 82K
R1720	178281	93697-417	RES CMF 1/8W 5% 6.8K
R1721	205244	1B14213-82A	RES CMF 1/10W 5% 82K
R1722	175046	2819434-432	RES CF 1/4W 5% 330R
R1723	207833	93697-436	RES CMF 1/8W 5% 43K
R1724	178281	93697-417	RES CMF 1/8W 5% 6.8K
R1725	197903	1B14212-18A	RES CMF 1/10W 5% 1.8K
R1726	176816	93697-445	RES CMF 1/8W 5% 100K
R1727	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1728	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1729	175418	93697-414	RES CMF 1/8W 5% 5.1K
R1731	192097	1B14212-47A	RES CMF 1/10W 5% 4.7K
R1734	174364	93697-421	RES CMF 1/8W 5% 10K
R1736	174364	93697-421	RES CMF 1/8W 5% 10K
R1738	178281	93697-417	RES CMF 1/8W 5% 6.8K
R1739	178281	93697-417	RES CMF 1/8W 5% 6.8K
R1740	178277	93697-422	RES CMF 1/8W 5% 11K
R1741	206402	93697-434	RES CMF 1/8W 5% 36K
R1742	176366	93697-405	RES CMF 1/8W 5% 2.2K
R1743	175325	2819434-373	RES CF 1/4W 5% 100R
R1744	175418	93697-414	RES CMF 1/8W 5% 5.1K
R1745	205346	1B14212-56A	RES CMF 1/10W 5% 5.6K
R1746	178277	93697-422	RES CMF 1/8W 5% 11K
R1747	178281	93697-417	RES CMF 1/8W 5% 6.8K
R1748	178277	93697-422	RES CMF 1/8W 5% 11K
R1749	176366	93697-405	RES CMF 1/8W 5% 2.2K
R1750	206402	93697-434	RES CMF 1/8W 5% 36K
R1751	174364	93697-421	RES CMF 1/8W 5% 10K
R1752	175418	93697-414	RES CMF 1/8W 5% 5.1K
R1753	205346	1B14212-56A	RES CMF 1/10W 5% 5.6K
R1754	178277	93697-422	RES CMF 1/8W 5% 11K
R1755	204275	93697-185	RES CMF 1/8W 10% 4.7M
R1756	181078	93697-477	RES CMF 1/8W 5% 2.2M
R1757	204275	93697-185	RES CMF 1/8W 10% 4.7M
R1758	205289	93697-481	RES CMF 1/8W 5% 3.3M
R1759	205289	93697-481	RES CMF 1/8W 5% 3.3M
R1760	204278	1B14225-47A	RES CMF 1/10W 10% 4.7M
R1761	181078	93697-477	RES CMF 1/8W 5% 2.2M
R1762	204278	1B14225-47A	RES CMF 1/10W 10% 4.7M
R1763	204278	1B14225-47A	RES CMF 1/10W 10% 4.7M
R1764	193343	1B14213-56A	RES CMF 1/10W 5% 56K

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R1765	181163	93697-457	RES CMF 1/8W 5% 330K
R1766	174366	93697-427	RES CMF 1/8W 5% 18K
R1767	178281	93697-417	RES CMF 1/8W 5% 6.8K
R1768	162004	93697-439	RES CMF 1/8W 5% 56K
R1769	181163	93697-457	RES CMF 1/8W 5% 330K
R1770	174366	93697-427	RES CMF 1/8W 5% 18K
R1771	178281	93697-417	RES CMF 1/8W 5% 6.8K
R1772	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1773	175055	2819434-397	RES CF 1/4W 5% 1K
R1774	175055	2819434-397	RES CF 1/4W 5% 1K
R1775	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1776	197907	1B14212-39A	RES CMF 1/10W 5% 3.9K
R1779	192084	1B14214-10A	RES CMF 1/10W 5% 100K
R1780	205394	1B14225-24A	RES CMF 1/10W 10% 2.4M
R1781	176816	93697-445	RES CMF 1/8W 5% 100K
R1782	176816	93697-445	RES CMF 1/8W 5% 100K
R1783	174364	93697-421	RES CMF 1/8W 5% 10K
R1784	174364	93697-421	RES CMF 1/8W 5% 10K
R1786	181484	93697-403	RES CMF 1/8W 5% 1.8K
R1787	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1788	174348	93697-397	RES CMF 1/8W 5% 1K
R1791	175323	2819434-422	RES CF 1/4W 5% 11K
R1792	197620	1B14213-11A	RES CMF 1/10W 5% 11K
R1794	175418	93697-414	RES CMF 1/8W 5% 5.1K
R1798	179963	2819434-453	RES CF 1/4W 5% 220K
R1799	192093	1B14214-22A	RES CMF 1/10W 5% 220K
R1800	174364	93697-421	RES CMF 1/8W 5% 10K
R1801	174364	93697-421	RES CMF 1/8W 5% 10K
R1802	174364	93697-421	RES CMF 1/8W 5% 10K
R1803	175418	93697-414	RES CMF 1/8W 5% 5.1K
R1804	195937	1B14213-10A	RES CMF 1/10W 5% 10K
U1700	207831	1A51158-01A	IC SRS PROCESSOR
U1703	161079	1421826-001	IC MODE SELECT SWITCH
U1704	149018	1421754-001	IC OP AMP
U1705	149018	1421754-001	IC OP AMP
U1708	154027	1421710-001	IC MIXER SWITCH

SURROUND SOUND CBA

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	219416	2F26018-503	● CIRCUIT COMPLETE CTC169PD.PH
C1301	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1302	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C1303	207853	2861147-87S	CAPCC .15UF Z Y5V 50V
C1304	196106	2861143-85A	CAPCC 150PF K NPO 50V
C1305	190551	2861146-75Z	CAPCC .022UF K X7R 50V
C1306	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C1307	189992	1C30179-47A	CAP LYTC 4.7UF M 100V
C1308	189979	1C30230-47A	CAP LYTC 47UF M 25V
C1309	189992	1C30179-47A	CAP LYTC 4.7UF M 100V
C1310	181460	2861144-95Z	CAPCC 1000PF K X7R 50V
C1311	190551	2861146-75Z	CAPCC .022UF K X7R 50V
C1312	196106	2861143-85A	CAPCC 150PF K NPO 50V
C1313	193042	1C30231-22A	CAP LYTC 220UF M 25V
C1314	193042	1C30231-22A	CAP LYTC 220UF M 25V
C1315	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C1316	193042	1C30231-22A	CAP LYTC 220UF M 25V
C1317	174423	2861146-35Z	CAPCC .01UF K X7R 50V
C1318	193042	1C30231-22A	CAP LYTC 220UF M 25V
C1319	190552	2861147-65Z	CAPCC .1UF K X7R 50V
C1320	174407	2861142-84A	CAPCC 27PF J NPO 50V
C1321	174407	2861142-84A	CAPCC 27PF J NPO 50V
C1322	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1323	195694	2861147-47S	CAPCC .068UF Z Y5Z 50V
C1324	201132	2861145-75Z	CAPCC 3900PF K X7R 50V
C1325	174627	2861146-95Z	CAPCC 33000PF K 50V
C1326	189981	2821726-141	CAP LYTC 10UF M 25V
C1327	189991	1C30179-10A	CAP LYTC 1UF M 100V
C1328	189981	2821726-141	CAP LYTC 10UF M 25V
C1329	195691	1C30179-22A	CAP LYTC 2.2UF M 100V
C1330	174416	2861144-55A	CAPCC 470PF K NPO 50V
C1331	190548	2861145-85Z	CAPCC 4700PF K X7R 50V
C1332	205235	2861145-96Z	CAPCC 5600PF M X7R 50V
C1333	189981	2821726-141	CAP LYTC 10UF M 25V
C1334	189981	2821726-141	CAP LYTC 10UF M 25V
C1335	189981	1C30150-10A	CAP LYTC 10UF M 50V
C1336	181099	2821714-230	CAP POLY .33UF K 63V
C1337	181845	2861144-74A	CAPCC 680PF J NPO 50V
C1338	207864	2861145-95Z	CAPCC 5600PF K X7R 50V
C1340	190548	2861145-85Z	CAPCC 4700PF K X7R 50V
C1341	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1342	189992	1C30179-47A	CAP LYTC 4.7UF M 100V
C1343	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1344	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1346	176770	2841245-522	CAPCD .39UF K Z5R 50V
C1347	190721	1C31142-10A	CAP LYTC 1000UF 35V
C1348	195690	1C30179-15A	CAP LYTC 1.5UF M 100V
C1349	189979	1C30230-47A	CAP LYTC 47UF M 25V
C1350	214045	1C30241-10A	CAP LYTC 100UF M 35V
C1351	189992	1C30179-47A	CAP LYTC 4.7UF M 100V
C1353	189991	1C30179-10A	CAP LYTC 1UF M 100V
C1354	181091	2861143-84A	CAPCC 150PF J NPO 50V
C1356	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1357	194366	1C30231-10A	CAP LYTC 100UF M 25V
C1358	189981	1C30150-10A	CAP LYTC 10UF M 50V
C1360	189981	1C30150-10A	CAP LYTC 10UF M 50V
C1361	189981	1C30150-10A	CAP LYTC 10UF M 50V
C1362	181462	2861148-17S	CAPCC .22UF Z Y5V 50V
C1363	207865	1C30231-33A	CAP LYTC 330UF M 25V
C1364	195691	1C30179-22A	CAP LYTC 2.2UF M 100V
CR1301	201133	1A40101-01A	DIODE
CR1302	147015	99203-203	DIODE
CR1303	147015	99203-203	DIODE
J1301	204955	XX10004-940	* CONNECTOR 2 PIN SPKR BD
J1302	202910	XX10004-990	CONNECTOR 7 PIN POWER
J1303	201137	XX10004-980	CONNECTOR 6 PIN DOL I/O
J1304	201134	XX10005-010	CONNECTOR 8 PIN PROLOG
J1305	207846	XX10005-220	CONNECTOR 7 PIN R/L I/O
JC302	181161	93697-005	RES CMF 1/8W 5% .05R
JC303	192065	1B14229-00A	RES CMF 1/10W 10% .0R
JC304	192065	1B14229-00A	RES CMF 1/10W 10% .0R
JC305	181161	93697-005	RES CMF 1/8W 5% .05R
JC306	181161	93697-005	RES CMF 1/8W 5% .05R
JC308	192065	1B14229-00A	RES CMF 1/10W 10% .0R
L1301	197614	1C51109-47A	COIL 4.7UH
Q1301	179740	1417500-001	TRANSISTOR DELY ADR SW
Q1302	179740	1417500-001	TRANSISTOR DLBY ON/OFF
Q1304	179740	1417500-001	TRANSISTOR CCM
Q1305	179740	1417500-001	TRANSISTOR L AUDIO AMP
Q1306	179740	1417500-001	TRANSISTOR S/S OUT AMP
Q1307	179741	1417501-001	TRANSISTOR L AUDIO BUF
Q1308	179740	1417500-001	TRANSISTOR R AUDIO AMP
Q1309	179741	1417501-001	TRANSISTOR R AUDIO BUF
Q1310	179740	1417500-001	TRANSISTOR MUTE SWITCH
Q1312	179740	1417500-001	TRANSISTOR L/R/S SW
Q1313	179740	1417500-001	TRANSISTOR L+R/L-R SW
Q1314	177788	1417455-001	TRANSISTOR VOLTAGE REG
R1300	192835	93697-425	RES CMF 1/8W 5% 15K
R1301	176813	93697-433	RES CMF 1/8W 5% 33K
R1302	181496	93697-416	RES CMF 1/8W 5% 6.2K
R1303	180325	93697-428	RES CMF 1/8W 5% 20K
R1304	176366	93697-405	RES CMF 1/8W 5% 2.2K
R1305	174367	93697-429	RES CMF 1/8W 5% 22K
R1306	178299	93697-415	RES CMF 1/8W 5% 5.6K
R1307	174361	93697-469	RES CMF 1/8W 5% 1M
R1308	179378	93697-437	RES CMF 1/8W 5% 47K
R1309	181080	93697-409	RES CMF 1/8W 5% 3.3K
R1310	192835	93697-425	RES CMF 1/8W 5% 15K
R1311	181065	93697-419	RES CMF 1/8W 5% 8.2K
R1312	181065	93697-419	RES CMF 1/8W 5% 8.2K
R1313	181065	93697-419	RES CMF 1/8W 5% 8.2K
R1314	175418	93697-414	RES CMF 1/8W 5% 5.1K
R1315	181074	93697-435	RES CMF 1/8W 5% 39K
R1316	174364	93697-421	RES CMF 1/8W 5% 10K
R1317	175418	93697-414	RES CMF 1/8W 5% 5.1K
R1318	174364	93697-421	RES CMF 1/8W 5% 10K
R1319	179963	2819434-453	RES CF 1/4W 5% 220K
R1320	175418	93697-414	RES CMF 1/8W 5% 5.1K
R1324	174364	93697-421	RES CMF 1/8W 5% 10K
R1325	174367	93697-429	RES CMF 1/8W 5% 22K
R1326	174364	93697-421	RES CMF 1/8W 5% 10K
R1327	175418	93697-414	RES CMF 1/8W 5% 5.1K
R1328	174367	93697-429	RES CMF 1/8W 5% 22K

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
R1329	174349	93697-407	RES CMF 1/8W 5% 2.7K
R1330	174364	93697-421	RES CMF 1/8W 5% 10K
R1331	175418	93697-414	RES CMF 1/8W 5% 5.1K
R1332	205302	93697-455	RES CMF 1/8W 5% 270K
R1333	181051	93697-402	RES CMF 1/8W 5% 1.6K
R1334	192082	1B14212-15A	RES CMF 1/10W 5% 1.5K
R1336	162004	93697-439	RES CMF 1/8W 5% 56K
R1337	175742	93697-381	RES CMF 1/8W 5% 220R
R1338	179963	2819434-453	RES CF 1/4W 5% 220K
R1340	194927	1B14211-10A	RES CMF 1/10W 5% 100R
R1341	175325	2819434-373	RES CF 1/4W 5% 100R
R1342	192096	1B14212-22A	RES CMF 1/10W 5% 2.2K
R1343	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1344	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1345	176366	93697-405	RES CMF 1/8W 5% 2.2K
R1346	192100	1B14212-10A	RES CMF 1/10W 5% 1K
R1347	174348	93697-397	RES CMF 1/8W 5% 1K
R1348	197472	1B14211-56A	RES CMF 1/10W 5% 560R
R1349	176818	93697-373	RES CMF 1/8W 5% 100R
R1350	194927	1B14211-10A	RES CMF 1/10W 5% 100R
R1351	204275	93697-185	RES CMF 1/8W 10% 4.7R
R1352	174364	93697-421	RES CMF 1/8W 5% 10K
R1360	176648	2819434-407	RES CF 1/4W 5% 2.7K
R1361	162001	93697-401	RES CMF 1/8W 5% 1.5K
R1362	179378	93697-437	RES CMF 1/8W 5% 47K
R1363	175418	93697-414	RES CMF 1/8W 5% 5.1K
R1364	178281	93697-417	RES CMF 1/8W 5% 6.8K
R1365	174364	93697-421	RES CMF 1/8W 5% 10K
R1366	175055	2819434-397	RES CF 1/4W 5% 1K
R1367	174367	93697-429	RES CMF 1/8W 5% 22K
R1368	174348	93697-397	RES CMF 1/8W 5% 1K
R1369	175054	2819434-429	RES CF 1/4W 5% 22K
R1370	192104	1B14211-39A	RES CMF 1/10W 5% 390R
R1371	147960	993272-341	* RES CFFP 1/4W 5% 4.7R
R1372	176366	93697-405	RES CMF 1/8W 5% 2.2K
R1373	176634	2819434-417	RES CF 1/4W 5% 6.8K
R1374	181496	93697-416	RES CMF 1/8W 5% 6.2K
R1375	175418	93697-414	RES CMF 1/8W 5% 5.1K
R1377	174349	93697-407	RES CMF 1/8W 5% 2.7K
R1379	178281	93697-417	RES CMF 1/8W 5% 6.8K
R1380	176818	93697-373	RES CMF 1/8W 5% 100R
R1381	176816	93697-445	RES CMF 1/8W 5% 100K
R1382	181071	93697-406	RES CMF 1/8W 5% 2.4K
R1383	181071	93697-406	RES CMF 1/8W 5% 2.4K
R1384	206729	1B14212-24A	RES CMF 1/10W 5% 2.4K
R1385	206729	1B14212-24A	RES CMF 1/10W 5% 2.4K
R1388	175325	2819434-373	RES CF 1/4W 5% 100R
R1389	176818	93697-373	RES CMF 1/8W 5% 100R
R1390	194927	1B14211-10A	RES CMF 1/10W 5% 100R
R1391	194927	1B14211-10A	RES CMF 1/10W 5% 100R
R1392	176818	93697-373	RES CMF 1/8W 5% 100R
R1393	194927	1B14211-10A	RES CMF 1/10W 5% 100R
R1396	197640	1B14214-15A	RES CMF 1/10W 5% 150K
U1301	196122	1A51110-01A	IC DUAL ATTENUATOR
U1302	154027	1421710-001	IC MODE SELECT
U1303	207829	1A68121-01A	IC DOLBY PROCESSOR
U1304	207830	1A64108-01A	IC DIGITAL MEMORY
U1305	216806	XX11090-690	IC DUAL ATTENUATOR
U1306	196122	1A51110-01A	IC OP AMP
Y1301	209856	2816766-13A	CRYSTAL 8MHZ
	215718	2844624-09A	* INSULATOR

TUNER ASSEMBLY M-2030

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	203533	2G26902-504	TUNER COMPLETE
CH01	200528	XX43134-700	CAPCD 22PF J 50V
CH02	200565	XX60041-450	CAPCC 15PF J 50V
CH03	200483	XX30059-750	CAPCC 10PF C 50V
CH04	200545	XX43373-350	CAPCC 27PF J 50V
CH05	200549	XX43374-150	CAPCC 120PF J 50V
CH06	200552	XX43434-650	CAPCC .75PF B 50V
CH07	200571	XX90296-350	CAPCC 15PF D 50V
CH08	200484	XX30085-850	CAPCC 12PF D 50V
CH09	200549	XX43374-150	CAPCC 120PF J 50V
CH11	200467	XX43000-870	CAPCD 2.2PF C 50V
CH12	200468	XX43374-350	CAPCC 180PF J 50V
CH13	200469	XX43344-850	CAPCC 1000PF J 50V
CH17	200541	XX43371-550	CAPCC 1PF C 50V
CH21	200542	XX43371-750	CAPCC 1.5PF C 50V
CH22	200484	XX30085-850	CAPCC 12PF D 50V
CH23	200549	XX43374-150	CAPCC 120PF J 50V
CH37	200550	XX43374-250	CAPCC 150PF J 50V
CH38	200550	XX43374-250	CAPCC 150PF J 50V
CH39	200536	XX43334-650	CAPCC 4.7PF C 50V
CH40	200561	XX50269-150	CAPCC 82PF J 50V
CH41	200562	XX50269-450	CAPCC 22PF J 50V
CH42	200486	XX40159-450	CAPCC 22PF J 50V
CH43	200527	XX43128-150	CAPCC 82PF J 50V
CH44	200538	XX43335-250	CAPCC 15PF J 50V
CH45	200485	XX30679-650	CAPCC 4700PF M 50V
CH46	200572	XX90323-650	CAPCC 22PF J 50V
CH47	200533	XX43334-050	CAPCC 1.5PF C 50V
CH50	200549	XX43374-150	CAPCC 120PF J 50V
CH55	200534	XX43334-250	CAPCC 2.2PF C 50V
CH56	200573	XX90323-750	CAPCC 1000PF K 50V
CH57	200548	XX43374-050	CAPCC 100PF J 50V
CH59	200570	XX90164-050	CAPCC 1000PF M 50V
CH60	200551	XX43374-850	CAPCC 470PF J 50V
CH61	200479	XX10510-450	CAPCC 100PF M 25V
CH62	200573	XX90323-750	CAPCC 1000PF K 50V
CH63	200544	XX43373-250	CAPCC 22PF J 50V
CH64	200573	XX90323-750	CAPCC 1000PF K 50V
CH65	200573	XX90323-750	CAPCC 1000PF K 50V
CH66	200480	XX10562-870	CAPCD 390PF G 63V
CH68	200470	XX20206-750	CAPCC .47PF B 50V
CH69	200570	XX90164-050	CAPCC 1000PF M 50V
CH70	200570	XX90164-050	CAPCC 1000PF M 50V
CH72	200480	XX10562-870	CAPCD 390PF G 63V
CH74	200540	XX43336-050	CAPCC 68PF J 50V
CH75	200469	XX43344-850	CAPCC 1000PF J 50V
CH76	200532	XX43314-450	CAPCC 1000PF J 50V
CH77	200546	XX43373-450	CAPCC 33PF J 50V
CH78	200569	XX70180-450	CAPCC 3.9PF C 50V
CH79	200485	XX30679-650	CAPCC 4700PF M 50V
CH80	200535	XX43334-450	CAPCC 3.3PF C 50V
CH82	200485	XX30679-650	CAPCC 4700PF M 50V
CH84	200568	XX70155-150	CAPCC 170PF J 50V
CH85	200573	XX90323-750	CAPCC 1000PF K 50V
CH86	200485	XX30679-650	CAPCC 4700PF M 50V
CH87	200547	XX43373-750	CAPCC 56PF J 50V
CH88	200543	XX43372-350	CAPCC 4.7PF C 50V
CH90	200573	XX90323-750	CAPCC 1000PF K 50V
CH91	200573	XX90323-750	CAPCC 1000PF K 50V
CH94	200485	XX30679-650	CAPCC 4700PF M 50V
CH95	200531	XX43267-950	CAPCC 68PF J 50V
CH96	200488	XX40184-350	CAPCC 6.8PF D 50V
CH97	200479	XX10510-450	CAPCC 100PF M 25V
CH98	200470	XX20206-750	CAPCC .47PF B 50V
CI01	200485	XX30679-650	CAPCC 4700PF M 50V
CI02	200573	XX90323-750	CAPCC 1000PF K 50V
CI04	200487	XX40167-050	CAPCC .047UF Z 50V
CI05	200526	XX43043-750	CAPCC 4.7PF C 50V
CI06	200530	XX43152-500	CAP POLY .22UF M 63V
CI07	200539	XX43335-350	CAPCC 18PF J 50V
CI08	200548	XX43374-050	CAPCC 100PF J 50V
CI09	200543	XX43372-350	CAPCC 4.7PF C 50V
CI10	200537	XX43335-050	CAPCC 10PF D 50V
CI11	200573	XX90323-750	CAPCC 1000PF K 50V
CI12	200573	XX90323-750	CAPCC 1000PF K 50V
CI13	200485	XX30679-650	CAPCC 4700PF M 50V
CI14	200573	XX90323-750	CAPCC 1000PF K 50V
CI15	200573	XX90323-750	CAPCC 1000PF K 50V
CI16	200529	XX43135-570	CAPCD 1000PF M 50V
CI17	200573	XX90323-750	CAPCC 1000PF K 50V
CI18	200485	XX30679-650	CAPCC 4700PF M 50V
CI19	200573	XX90323-750	CAPCC 1000PF K 50V
CI20	200573	XX90323-750	CAPCC 1000PF K 50V
CI21	200573	XX90323-750	CAPCC 1000PF K 50V
DH01	200553	XX44076-685	DIODE
DH02	200471	XX60104-385	DIODE
DH46	200472	XX80104-802	DIODE
DH57	200554	XX44077-985	DIODE
DH58	200471	XX60104-385	DIODE
DH66	200472	XX80104-802	DIODE
DH69	200471	XX60104-385	DIODE

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
DH73	200471	XX60104-385	DIODE
DH75	200555	XX44079-885	DIODE
DH83	200472	XX80104-802	DIODE
DH84	200472	XX80104-802	DIODE
DH97	200471	XX60104-385	DIODE
II06	200558	XX46147-900	IC FS & PRESCALER
JH03	200473	XX41395-075	RES CMF 1/10W 0% 0R
JH05	200492	XX41047-950	RES CMF 0R
JH08	200492	XX41047-950	RES CMF 0R
JH10	200492	XX41047-950	RES CMF 0R
JH11	200473	XX41395-750	RES CMF 0R
LH64	200559	XX47025-302	COIL 3.9UH
LH78	200481	XX20060-102	COIL 1.2UH
M150	200474	XX67580-200	CONNECTOR PIN
Q106	200560	XX48088-700	CRYSTAL 4MHZ
RH01	200519	XX41247-050	RES CMF .06W 5% 82K
RH02	200521	XX41247-250	RES CMF .06W 5% 120K
RH05	200493	XX41058-450	RES CMF 1/8W 5% 10K
RH06	200475	XX90323-050	RES CMF 1/10W 5% 220R
RH07	200503	XX41243-550	RES CMF .06W 5% 10R
RH08	175753	XX41417-802	RES CF 1/4W 5% 10R
RH12	200507	XX41245-150	RES CMF .06W 5% 390R
RH14	200513	XX41245-950	RES CMF .06W 5% 22K
RH16	200503	XX41243-550	RES CMF .06W 5% 10R
RH21	200493	XX41058-450	RES CMF 1/8W 5% 10K
RH25	200497	XX41060-550	RES CMF 1/8W 5% 2.7K
RH33	200495	XX41059-250	RES CMF 1/8W 5% 22K
RH36	200495	XX41059-250	RES CMF 1/8W 5% 22K
RH43	200496	XX41060-150	RES CMF 1/8W 5% 120R
RH46	200510	XX41245-450	RES CMF .06W 5% 820R
RH53	200493	XX41058-450	RES CMF 1/8W 5% 10K
RH54	200517	XX41246-850	RES CMF .06W 5% 56K
RH55	186819	XX41415-402	RES CF 1/4W 5% 1R
RH56	200494	XX41058-850	RES CMF 1/8W 5% 47K
RH57	200518	XX41246-950	RES CMF .06W 5% 68K
RH58	200523	XX41248-650	RES CMF .06W 5% 3.3K
RH60	200495	XX41059-250	RES CMF 1/8W 5% 22K
RH61	200513	XX41245-950	RES CMF .06W 5% 22K
RH62	200500	XX41099-750	RES CMF .06W 5% 1.8K
RH63	200520	XX41247-150	RES CMF .06W 5% 100K
RH64	200516	XX41246-550	RES CMF .06W 5% 33K
RH66	200475	XX90323-050	RES CMF 1/10W 5% 220R
RH67	200490	XX41043-950	RES CMF 1/8W 5% 18R
RH68	200495	XX41059-250	RES CMF 1/8W 5% 22K
RH71	200501	XX41241-250	RES CMF .06W 5% 2.7K
RH74	200501	XX41241-250	RES CMF .06W 5% 2.7K
RH75	200525	XX41248-850	RES CMF .06W 5% 5.6K
RH76	200515	XX41246-450	RES CMF .06W 5% 27K
RH77	200501	XX41241-250	RES CMF .06W 5% 2.7K
RH78	200515	XX41246-450	RES CMF .06W 5% 27K
RH79	200476	XX41245-050	RES CMF .06W 5% 220R
RH80	200504	XX41243-650	RES CMF .06W 5% 12R
RH81	200505	XX41243-750	RES CMF .06W 5% 15R
RH82	200509	XX41245-350	RES CMF .06W 5% 560R
RH83	200524	XX41248-750	RES CMF .06W 5% 4.7K
RH85	200499	XX41085-450	RES CMF 1/8W 5% 10R
RH86	200505	XX41243-750	RES CMF .06W 5% 15R
RH88	200510	XX41245-450	RES CMF .06W 5% 820R
RH89	200511	XX41245-750	RES CMF .06W 5% 1.5K
RH90	200502	XX41241-350	RES CMF .06W 5% 6.8K
RH91	200512	XX41245-850	RES CMF .06W 5% 1.8K
RH92	200502	XX41241-350	RES CMF .06W 5% 6.8K
RH93	200514	XX41246-050	RES CMF .06W 5% 10K
RH94	200508	XX41245-250	RES CMF .06W 5% 470R
RH95	200491	XX41044-950	RES CMF 1/8W 5% 270R
RH97	200514	XX41246-050	RES CMF .06W 5% 10K
RH98	200514	XX41246-050	RES CMF .06W 5% 10K
RI01	200514	XX41246-050	RES CMF .06W 5% 10K
RI02	200522	XX41248-350	RES CMF .06W 5% 1M
RI04	200513	XX41245-950	RES CMF 1/8W 5% 22K
RI07	200506	XX41244-650	RES CMF .06W 5% 100R
RI08	200498	XX41083-950	RES CMF 1/8W 5% 100R
RI10	200506	XX41244-650	RES CMF .06W 5% 100R
RI11	200513	XX41245-950	RES CMF .06W 5% 22K
RI13	200513	XX41245-950	RES CMF .06W 5% 22K

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
RI14	200513	XX41245-950	RES CMF .06W 5% 22K
RI15	200524	XX41248-750	RES CMF .06W 5% 4.7K
RI16	200524	XX41248-750	RES CMF .06W 5% 4.7K
RI17	200524	XX41248-750	RES CMF .06W 5% 4.7K
RI18	200514	XX41246-050	RES CMF .06W 5% 10K
RI19	200514	XX41246-050	RES CMF .06W 5% 10K
RI20	200478	XX41245-550	RES CMF .06W 5% 1K
TH04	200566	XX60104-285	TRANSISTOR UHF RF AMP
TH14	200567	XX60305-085	TRANSISTOR UHF OSC/MIX
TH65	200566	XX60104-285	TRANSISTOR VHF RF AMP
TH75	200557	XX45059-185	TRANSISTOR VHF MIXER
TH87	200574	XX90347-785	TRANSISTOR VHF OSC
TH93	200557	XX45059-185	TRANSISTOR IF POST AMP
TI11	200556	XX45053-885	TRANSISTOR UHF
TI13	200556	XX45053-885	TRANSISTOR BAND 2 SW
TI14	200556	XX45053-885	TRANSISTOR BAND 1 SW
	203761	XX40247-300	COVER, W/O HOLES
	203762	XX40247-100	COVER, W/HOLES

RF SWITCH/SPLITTER
(PART OF M-2030)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
CS01	200570	XX90164-050	CAPCC 1000PF M 50V
CS02	200570	XX90164-050	CAPCC 1000PF M 50V
CS03	200479	XX10510-450	CAPCC 1000PF M 25V
CS05	203775	XX60232-450	CAPCC 4700PF M Y5S 12V
CS06	200561	XX50269-150	CAPCC 82PF K 50V
CS08	203775	XX60232-450	CAPCC 4700PF M Y5S 12V
CS09	203776	XX10661-850	CAPCC 120PF K Y5E 50V
CS10	203776	XX10661-850	CAPCC 120PF K Y5E 50V
CS11	203775	XX60232-450	CAPCC 4700PF M Y5S 12V
CS12	203775	XX60232-450	CAPCC 4700PF M Y5S 12V
CS14	200561	XX50269-150	CAPCC 82PF K 50V
CS15	203777	XX40234-950	CAPCC 33PF J SL 50V
CS16	203775	XX60232-450	CAPCC 4700PF M Y5S 12V
CS17	203776	XX10661-850	CAPCC 120PF K Y5E 50V
CS18	203776	XX10661-850	CAPCC 120PF K Y5E 50V
CS19	203775	XX60232-450	CAPCC 4700PF M Y5S 12V
CS20	203778	XX43134-500	CAPCD 1000PF M 2B 50V
CS21	200479	XX10510-450	CAPCC 1000PF M 25V
CS22	200479	XX10510-450	CAPCC 1000PF M 25V
CS23	203775	XX60232-450	CAPCC 4700PF M Y5S 12V
DS07	200472	XX80104-802	DIODE
DS08	200555	XX44079-885	DIODE
DS09	200471	XX60104-385	DIODE
DS10	200555	XX44079-885	DIODE
DS11	203780	XX80249-485	DIODE
DS12	200555	XX44079-885	DIODE
DS14	203781	XX44061-350	DIODE
DS15	203781	XX44061-350	DIODE
DS16	200555	XX44079-885	DIODE
DS17	200471	XX60104-385	DIODE
DS18	200555	XX44079-885	DIODE
DS19	200471	XX60104-385	DIODE
DS20	200555	XX44079-885	DIODE
JS05	200473	XX41395-750	RES CMF 1/10W 0% 0R
M150	200474	XX67580-200	CONNECTOR PIN
RH87	200478	XX41245-550	RES CMF .06W 5% 1K
RS01	203782	XX41112-702	RES CF .14W 5% 4.7K
RS02	203783	XX41112-002	RES CF .14W 5% 1K
RS03	200510	XX41245-450	RES CMF .06W 5% 820R
RS04	203784	XX41248-950	RES CMF .06W 5% 8.2K
RS05	203785	XX41111-102	RES CF .14W 5% 100R
RS06	203786	XX41246-350	RES CMF .06W 5% 18K
RS07	200524	XX41248-750	RES CMF .06W 5% 4.7K
RS08	200514	XX41246-050	RES CMF .06W 5% 10K
RS10	203787	XX41245-650	RES CMF .06W 5% 1.2K
RS11	203789	XX41112-302	RES CF .14W 5% 2.2K
RS12	203790	XX41058-750	RES CMF 1/8W 5% 4.7K
RS13	203791	XX41110-802	RES CF .14W 5% 56R
RS14	203783	XX41112-002	RES CF .14W 5% 1K
RS15	203791	XX41110-802	RES CF .14W 5% 56R
RS16	203792	XX41099-650	RES CMF 1/8W 5% 56R

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
RS17	203789	XX41112-302	RES CF .14W 5% 2.2K
RS18	203792	XX41099-650	RES CMF 1/8W 5% 56R
RS20	203789	XX41112-302	RES CF .14W 5% 2.2K
RS21	200478	XX41245-550	RES CMF .06W 5% 1K
RS22	203791	XX41110-802	RES CF .14W 5% 56R
RS23	203783	XX41112-002	RES CF .14W 5% 1K
RS24	203791	XX41110-802	RES CF .14W 5% 56R
RS25	203789	XX41112-302	RES CF .14W 5% 2.2K
TS01	200556	XX45053-885	TRANSISTOR
TS02	203793	XX45048-685	TRANSISTOR
TS03	203793	XX45048-685	TRANSISTOR
	203794	XX30745-400	CONNECTOR, F TYPE
	203773	XX60245-100	COVER, W/NOTCH
	203774	XX60245-000	COVER, W/O NOTCH

REMOTE TRANSMITTER ASSEMBLIES

CRK59A
CRK59B
CRK59C
CRK59G
CRK59K

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
CRK59A	197460	2G21004-501	TRANSMITTER, REMOTE
CRK59B	197461	2G21004-502	TRANSMITTER, REMOTE
CRK59C	197462	2G21004-503	TRANSMITTER, REMOTE
CRK59G	204940	2G21004-518	TRANSMITTER, REMOTE
CRK59K	204943	2G21004-521	TRANSMITTER, REMOTE
C1	175400	1490001-052	CAP LYTC 10UF 16V
C2	175400	1490001-052	CAP LYTC 10UF 16V
C3	194903	1C18500-22A	CAPCC 22PF K NPO 50V
C4	194903	1C18500-22A	CAPCC 22PF K NPO 50V
C5	175400	1490001-052	CAP LYTC 10UF 16V
C6	192040	1C18501-47A	CAPCC 470PF K NPO 50V
CR1	164717	1471872-006	DIODE
CR2	148056	2811593-001	DIODE LED
CR3	148056	2811593-001	DIODE LED
JC1	181161	93697-005	RES CMF 1/8W 5% .05R
JC2	181161	93697-005	RES CMF 1/8W 5% .05R
PW1000	250057	2F39005-501	CIRCUIT COMPLETE
Q1	148996	1417318-003	TRANSISTOR
Q2	148996	1417318-003	TRANSISTOR
R1	250059	1B14213-30A	RES CMF 1/10W 5% 30K
R2	160183	2815583-432	RES CF 1/8W 5% 30K
R3	160183	2815583-432	RES CF 1/8W 5% 30K
R4	160183	2815583-432	RES CF 1/8W 5% 30K
R5	160183	2815583-432	RES CF 1/8W 5% 30K
R6	160183	2815583-432	RES CF 1/8W 5% 30K
R9	164887	2815583-397	RES CF 1/8W 5% 1K
R10	250060	1B14226-10A	RES CMF 1/10W 10% 10M
R11	175328	2819434-454	RES CF 1/4W 5% 240K
R12	192073	1B14210-10A	RES CMF 1/10W 5% 10R
R13	192074	1B14213-10A	RES CMF 1/10W 5% 10K
R14	829010	993218-349	RES CF 1/4W 5% 10R
R15	181075	93697-461	RES CMF 1/8W 5% 470K
R16	181075	93697-461	RES CMF 1/8W 5% 470K
R17	176668	2819434-461	RES CF 1/4W 5% 470K
R18	176668	2819434-461	RES CF 1/4W 5% 470K
R19	176668	2819434-461	RES CF 1/4W 5% 470K
R20	176668	2819434-461	RES CF 1/4W 5% 470K
R21	176668	2819434-461	RES CF 1/4W 5% 470K
R22	176668	2819434-461	RES CF 1/4W 5% 470K
U1	203811	1A66106-02A	IC
Y1	196001	2816766-007	CRYSTAL
		2819429-001	BATTERY, 1.5V AAA
	250052	8P15005-01A	BUTTONS, CRK59A
	250100	8P15005-02A	BUTTONS, CRK59B
	200071	8P15005-04A	BUTTONS, CRK59C
	200135	8P15005-03A	BUTTONS, CRK59G
	250053	2G30026-E1A	CASE, BOTTOM
	205923	2G30026-E2A	CASE, BOTTOM CRK59G,K
	250054	2G30026-A1A	CASE, TOP CRK59A
	250101	2G30026-A2A	CASE, TOP CRK59B
	200426	2G30026-A3A	CASE, TOP CRK59C
	200072	2G30026-A4A	CASE, TOP CRK59D
	205922	2G30026-A7A	CASE, TOP CRK59K
	173214	2874044-003	CONTACT, DUAL
	250055	4P25010-01A	CONTACT, DUAL BATTERY
	250063	4P25009-01A	CONTACT, NEG BATTERY
	250064	4P25008-01A	CONTACT, POS BATTERY
	250056	8R18016-01A	DOOR, BATTERY

CRK60A

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
CRK60A	206799	2G21008-503	TRANSMITTER REMOTE
		XX50853-970	BATTERY, 1.5V AAA
	173214	2874044-003	CONTACT, BATTERY
	208644	2G30048-N1A	DOOR, BATTERY

CRK62A
CRK62A2
CRK62B
CRK62B3
CRK62D

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
CRK62A	205500	2G21009-501	TRANSMITTER REMOTE
CRK62A2	210671	2G21009-504	TRANSMITTER REMOTE
CRK62B	205501	2G21009-502	TRANSMITTER REMOTE
CRK62B3	210672	2G21009-505	TRANSMITTER REMOTE
CRK62D	210827	2G21009-507	TRANSMITTER REMOTE
		XX50853-970	BATTERY, 1.5V AAA
	206809	6P25008-01A	CONTACT, BATTERY (POS)
	206810	8R18033-01A	DOOR, BATTERY
	206811	6P82004-01A	SPRING, BATTERY CONTACT

CRK70D1
CRK70G1

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
CRK70D1	225838	2G21025-04A	TRANSMITTER REMOTE
CRK70G1	225841	2G21025-07A	TRANSMITTER REMOTE
		XX50853-970	BATTERY, 1.5V AAA
	225648	8R18004-01A	DOOR, BATTERY

CRK74F1

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
CRK74F1	224262	2G21029-06A	TRANSMITTER REMOTE
		XX50853-970	BATTERY, 1.5V AAA
	173214	2874044-003	CONTACT, BATTERY
	224263	8R18064-02A	DOOR, BATTERY

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

CRK84C1
CRK84C2

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
CRK84C1	228005	2G21031-03A	TRANSMITTER REMOTE
CRK84C2	233069	2G21031-06A	TRANSMITTER REMOTE
		XX50853-970	BATTERY, 1.5V AAA
	224263	8R18064-02A	DOOR, BATTERY

INSTRUMENT ASSEMBLIES

M46GE944EG1
P46100TND01
P46100TND03
P46100TNN01
P46100TNN02
P46100TNN03
P46101WKCG1
P46130WKCG1
P46130WKDG1
P46150WKN01
P46150WKN02
P46151WKCG1
P46151WKCG2
P46151WKDG1
P46151WKDG2
P46159WKCG1
P46159WKDG1
P46159WKNG1
P46160WKCG1
P46160WKDG1
P46725SKLG1
P46726BADX1
P46727BADX1
P46728WKLG1
P46729BADX1
P46729BALG1
P46730WKLG1
P46731ATDX1
P46731ATLG1
P46732BADX1
P46732BALG1
P46738ATLG1
P46770CKDX1
P46770CKLG1
46GW939DX1
46GW940CG1
46GW941CG1
46GW943LG1
46GW944DX2
46GW944LG1
46GW944LG2
46GW950N01
46GW950N02
46GW950N03
46GW951CG1
46GW952CG1
46GW952DG1

P46100,150,46GW950

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
CPT	201952	2G48001-521	* PICTURE TUBE ASSEMBLY RED, W/HEAT SINK, LENS ELEMENT & ANODE LEAD
CPT	201954	2G48001-522	* PICTURE TUBE ASSEMBLY GREEN, W/HEAT SINK, LENS ELEMENT & ANODE LEAD
CPT	201953	2G48001-523	* PICTURE TUBE ASSEMBLY BLUE, W/HEAT SINK, LENS ELEMENT & ANODE LEAD

P46101,130,151,159,160,727,728,729,730, 46GW939,940,941,951,952

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
CPT	208647	2G48001-524	* PICTURE TUBE ASSEMBLY RED, W/HEAT SINK, LENS ELEMENT & ANODE LEAD
CPT	208648	2G48001-525	* PICTURE TUBE ASSEMBLY GREEN, W/HEAT SINK, LENS ELEMENT & ANODE LEAD
CPT	208649	2G48001-526	* PICTURE TUBE ASSEMBLY BLUE, W/HEAT SINK, LENS ELEMENT & ANODE LEAD

M46GE944,P46725,726,731,732,738,46GW943,944

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
CPT	225806	2G48002-524	* PICTURE TUBE ASSEMBLY RED, W/HEAT SINK, LENS ELEMENT & ANODE LEAD
CPT	225807	2G48002-525	* PICTURE TUBE ASSEMBLY GREEN, W/HEAT SINK, LENS ELEMENT & ANODE LEAD
CPT	225808	2G48002-526	* PICTURE TUBE ASSEMBLY BLUE, W/HEAT SINK, LENS ELEMENT & ANODE LEAD

P46770

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
CPT	224756	2G48001-584	* PICTURE TUBE ASSEMBLY RED, W/HEAT SINK, LENS ELEMENT & ANODE LEAD
CPT	224754	2G48001-585	* PICTURE TUBE ASSEMBLY GREEN, W/HEAT SINK, LENS ELEMENT & ANODE LEAD
CPT	224757	2G48001-586	* PICTURE TUBE ASSEMBLY BLUE, W/HEAT SINK, LENS ELEMENT & ANODE LEAD
SPKR1	187964	1B70103-01A	SPEAKER 5 IN 8 OHM 10W P46130,727,728,729, 730,46GW939,940,941
SPKR1	202434	1B70103-03A	SPEAKER 5 IN 8 OHM 10W P46100,150,46GW950
SPKR1	204951	XX48063-800	SPEAKER 130MM 8 OHM 25W P46101,151,159,160, 46GW951,952
SPKR	225810	XX15048-000	SPEAKER 5 X 7 IN 8 OHM 5W M46GE944,P46725, 726,731,732,738, 46GW943,944
SPKR1	214725	XX50903-040	SPEAKER 80 X 160MM 16 OHM 20W P46770
SPKR2	183168	1B70100-01A	SPEAKER 2 IN 8 OHM 3W P46130,727,728,729, 730,46GW939,940,941
SPKR2	202433	1B70100-02A	SPEAKER 2 IN 8 OHM 10W P46100,150,46GW950
SPKR2	205260	XX48036-600	SPEAKER 51MM 8 OHM 20W P46101,151,159,160, 770,46GW951,952
	189263	1468109-003	ADAPTER, 75/300 OHM
	BK1818	XX15051-75A	* BACK, COVER LOWER M46GE944,46GW943,944
	BK1210	8R52008-01C	* BACK, COVER LOWER P46100N01,N02,N03,150
	BK1237	8R52008-01D	* BACK, COVER LOWER P46100D01,D03
	BK1335	8R52008-08A	* BACK, COVER LOWER P46101,130,151,159, 160,728,729,730
	BK1736	XX15050-82A	* BACK, COVER LOWER P46725,726,731,732,738
	BK1336	8R52008-09A	* BACK, COVER LOWER P46727,46GW939,940, 941,951,952
	BK1532	8R52013-11A	* BACK, COVER LOWER P46770

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	BK1208	8R52008-03C	* BACK, COVER LOWER 46GW950
	BK1799	XX15058-250	* BACK, COVER UPPER M46GE944,P46725,726, 46GW943,944
	BK1209	8R01014-01A	* BACK, COVER UPPER P46100,150,46GW950
	BK1238	8R01014-01B	* BACK, COVER UPPER P46100TND01
	BK1334	2G04025-A1A	* BACK, COVER UPPER P46101,130,151,159, 160,727,728,729,730, 46GW939,940,941,951, 952
	BK1735	XX15049-840	* BACK, COVER UPPER P46731,732,738
	BK1533	2G04025-B4A	* BACK, COVER UPPER P46770
	BK1339	1U99720-007	BACK, STORAGE P46159
	BK1531	8R01056-03A	BACK, STORAGE P46770
	182820	2833709-001	BAFFLE, SPEAKER MTG
	204930	1U99770-006	BAFFLE, W/CLOTH P46100
	209099	1U99770-016	BAFFLE, W/CLOTH P46101, 151CG1,159
	210920	4R65002-02A	BAFFLE, W/CLOTH P46130
	204933	1U99770-010	BAFFLE, W/CLOTH P46150
	211013	6R65001-01A	BAFFLE, W/CLOTH P46151CG2,DG2
	211019	4R65002-03A	BAFFLE, W/CLOTH P46160, 728,730
	218946	4R65002-04A	BAFFLE, W/CLOTH P46729
	225811	6R65012-01A	BAFFLE, W/CLOTH P46731, 738
	225817	6R65012-02A	BAFFLE, W/CLOTH P46732
	226492	4R65002-05A	BAFFLE, W/CLOTH P46727, 46GW939
	210913	4R65002-01A	BAFFLE, W/CLOTH 46GW940 941
	205072	8R55121-009	BAFFLE, W/CLOTH 46GW950
	209098	1U99770-013	BAFFLE, W/CLOTH 46GW951,952
		XX15121-81A	BOOK, INSTRUCTION M46GE944
		1Q57151-01A	BOOK, INSTRUCTION P46100D01,N02
		1Q57201-01A	BOOK, INSTRUCTION (FRENCH) P46100D01, D02
		1Q57151-02A	BOOK, INSTRUCTION P46100D03,N03
		1Q57103-01B	BOOK, INSTRUCTION P46100N01
		1Q57193-01A	BOOK, INSTRUCTION P46101
		1Q57245-01A	BOOK, INSTRUCTION (FRENCH) P46101
		1Q57339-05A	BOOK, INSTRUCTION P46130
		1Q57339-F5A	BOOK, INSTRUCTION (FRENCH) P46130
		1Q57150-01A	BOOK, INSTRUCTION P46150N01
		1Q57150-02A	BOOK, INSTRUCTION P46150N02
		1Q57182-05A	BOOK, INSTRUCTION P46151,159
		1Q57246-05A	BOOK, INSTRUCTION (FRENCH) P46151,159
		1Q57182-05A	BOOK, INSTRUCTION P46160
		1Q57246-05A	BOOK, INSTRUCTION (FRENCH) P46160
		1Q57496-01B	BOOK, INSTRUCTION P46725,726
		1Q57496-F1B	BOOK, INSTRUCTION (FRENCH) P46725,726
		1Q57604-01A	BOOK, INSTRUCTION P46727
		1Q57604-F1A	BOOK, INSTRUCTION (FRENCH) P46727
		1Q57375-05A	BOOK, INSTRUCTION P46728,729,730,732
		1Q57375-F5A	BOOK, INSTRUCTION (FRENCH) P46728,729, 730,732
		XX15083-280	BOOK, INSTRUCTION P46731
		XX15083-290	BOOK, INSTRUCTION (FRENCH) P46731
		XX15083-880	BOOK, INSTRUCTION P46731,738
		XX15083-890	BOOK, INSTRUCTION (FRENCH) P46731,738
		1Q57371-05A	BOOK, INSTRUCTION P46770
		1Q57371-F5A	BOOK, INSTRUCTION (FRENCH) P46770
		1Q56365-05A	BOOK, INSTRUCTION 46GW939,940
		1Q56365-F5A	BOOK, INSTRUCTION (FRENCH) 46GW939
		1Q56391-05A	BOOK, INSTRUCTION 46GW941
		1Q56391-F5A	BOOK, INSTRUCTION (FRENCH) 46GW941
		XX15073-45A	BOOK, INSTRUCTION 46GW943,944
		XX15079-68A	BOOK, INSTRUCTION (FRENCH) 46GW943,944
		1Q56264-01B	BOOK, INSTRUCTION 46GW950N01,N02
		1Q56264-02A	BOOK, INSTRUCTION 46GW950N03
		1Q56327-01A	BOOK, INSTRUCTION 46GW951
		1Q56328-01A	BOOK, INSTRUCTION 46GW952
		1Q56329-01A	BOOK, INSTRUCTION (FRENCH) 46GW952
	208646	6Q15040-01A	BRACKET, SCREEN FRAME LOCK P46101,130,151, 159,160,727,728,729, 730,46GW939,940,941, 951,952
	225804	XX15048-260	BRACKET, SCREEN FRAME LOCK P46731,732,738
	218831	6Q15040-04B	BRACKET, SCREEN FRAME LOCK P46770
	203073	2G30024-E1C	BUTTONS
	225801	6R12005-01A	BUTTON, CAP P46726,731, 732,46GW943,944
	225802	6R12005-02A	BUTTON, POWER CAP P46726,731,732, 46GW943,944
	225803	XX15048-280	BUTTON, SHAFT P46726, 731,732,46GW943,944
	187802	XX10004-170	* CABLE, AC POWER
	204809	2G36013-528	CABLE, P46100TND01
	205924	2G36013-512	CABLE, SPEAKER
	237914	XX15189-890	CABLE, FOCUS/SCREEN ASY
	224416	2G36013-549	CABLE, P3404/P3001
	204810	2G36013-522	CABLE, P4701/P4702
	205186	2G36012-562	CABLE, P6401/P8003
	205187	2G36012-563	CABLE, P6402/P8002
	205188	2G36012-564	CABLE, P6403/P8001
	204816	2G36013-516	CABLE, P6404/P8203
	204814	2G36013-518	CABLE, P7005/P8104
	204817	2G36013-511	CABLE, P7006
	204813	2G36013-519	CABLE, P7013/P5001B
	204812	2G36013-520	CABLE, P7014/P5001G
	204811	2G36013-521	CABLE, P7015/P5001R
	204815	2G36013-517	CABLE, P7019/P8202
	202435	XX60409-824	CAP LYTC 1UF 25V NP
	184114	XX15000-990	CAP LYTC 2.2UF 35V NP
	178094	1471040-014	CAP LYTC 10UF 25V NP
	203524	6R54001-01A	CASTER, SWIVEL
	225798	XX15051-070	CASTER, FIXED M46GE944, P46725,731,732,738, 46GW943,944
	205524	2F26003-501	CIRCUIT, CROSSOVER P46101,151,159, 46GW951,952
	207926	1U99700-035	CLIP, SHELF P46770
	202515	XX30813-800	CONNECTOR, SPKR 2 PIN

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	250047	XX50757-600	CONNECTOR, SPKR 4 PIN
	226509	XX15051-100	COVER, CONVERGENCE M46GE944,P46725,726, 731,732, 46GW943,944
	237915	XX15224-980	* COVER, HV SPLITTER PLUG 46GW944DX2,LG2
	210222	6Q31002-08A	CUSHION, FOR SCREEN (3)
	218123	1U99700-078	FASTENER, VELCRO FOR GRILLE
	225797	1U99700-026	FASTENER, VELCRO FOR GRILLE M46GE944, P46725,731,732,738, 46GW943,944
	204809	2G36013-528	* FOCUS/SCREEN ASY
	223663	2G36013-578	* FOCUS/SCREEN ASY P46770
	237913	XX15219-400	* FOCUS/SCREEN ASY 46GW944DX2,LG2
	223221	XX20481-460	GASKET, ANODE LEADS
	223222	XX50896-620	GASKET, FOCUS LEAD
	209096	1U99700-041	GLASS, DOOR P46159,160
	218938	1U99700-088	GLASS, DOOR P46770
	226824	2G30053-Q3A	GRILLE, P46726 (SEE PANEL, CONTROL)
	218834	6R65011-02A	GRILLE, LEFT P46770
	218833	6R65011-01A	GRILLE, RIGHT P46770
	203077	1P40001-01A	GROMMET, BACK COVER (5)
	203078	1P40002-01A	GROMMET, MIRROR (5)
	218937	1U99700-095	HINGE, LH DOOR P46770
	218936	1U99700-094	HINGE, RH DOOR P46770
	200216	8R10006-01B	* HOUSING, FOCUS
	204906	XX55126-100	HOUSING, FOCUS COLLAR
	204907	XX70362-100	HOUSING, HV IN COLLAR
	204908	XX90504-300	HOUSING, HV OUT COLLAR
	205064	XX40431-090	* HV SPLITTER ASY
	203067	8Q02001-01B	* INSULATOR, HEAT BARRIER
	218934	1U99700-093	LATCH, DOOR P46770
	201957	6P98001-01A	* LENS, FOR TUBE
	236127	XX15119-290	* LENS, FOR TUBE M46GE944
	226491	6P98002-01A	* LENS, FOR TUBE P46727, 728,729,730,770, 46GW939,941
	225809	XX15046-900	* LENS, FOR TUBE P46725, 726,731,732,738, 46GW943,944LG1
	236577	XX15143-340	* LENS, FOR TUBE 46GW944DX2,LG2
	250045	6R23005-01A	LENS, LED/LDR P46100TND01
	195980	6P92001-03A	LOGO, RCA
	209092	6P92002-07A	LOGO, RCA P46101,130, 151,159,160
	209091	6P92003-02A	LOGO, SOUND RETRIEVAL P46151,159
	225799	6R31002-01A	LOGO, SOUND RETRIEVAL P46731,732,738
	201961	6P96001-01A	MIRROR
	236128	XX15154-130	MIRROR, M46GE944, 46GW944DX2,LG2
	226832	XX15058-260	MIRROR, P46725,726, 46GW943,944LG1
	225812	XX15048-240	MIRROR, P46731,732,738
	218835	8P96002-01A	MIRROR, P46770
	208650	6P43002-01A	NUT, WING UPPER BACK P46101,151,159,727, 728,729,730,770, 46GW939,940,941,951, 952
	203075	2G30024-B1C	OVERLAY, LEFT GE
	203082	2G30024-A1C	OVERLAY, LEFT RCA P46100
	203095	2G30024-A2A	OVERLAY, LEFT RCA P46150
	203754	6R16010-01B	OVERLAY, RF SW P46100TND01
	203079	6R06008-01C	* OVERLAY, RIGHT
	229221	2G30053-R3A	PANEL, CONTROL W/GRILLE M46GE944,46GW943,944
	203081	2G30024-Y1B	PANEL, CONTROL P46100, 150
	208645	2G30053-P4A	PANEL, CONTROL P46101, 130
	207090	2G30053-P1A	PANEL, CONTROL P46151, 159,160,728,729,730
	229632	2G30053-Q6A	PANEL, CONTROL W/GRILLE P46725
	226824	2G30053-Q3A	PANEL, CONTROL W/GRILLE P46726
	227723	2G30053-R4A	PANEL, CONTROL W/GRILLE P46727
	225800	2G30053-Q4A	PANEL, CONTROL P46731, 738
	225815	2G30053-Q9A	PANEL, CONTROL P46732
	218830	2G30089-P2A	PANEL, CONTROL P46770
	209056	2G30053-P3A	PANEL, CONTROL 46GW939, 940,941,951,952
	203074	2G30024-Z1B	PANEL, CONTROL 46GW950
	207485	4Q03004-01B	PANEL, FPA SUPPORT
	204931	1U99700-012	PIN, BAFFLE MTG P46100, 150
	203068		PIN, BAFFLE MTG 46GW950
	225796	2813700-039	PIN, SHELF M46GE944, 46GW944
	205545	8R15002-01A	* PLATE, SPEAKER MTG
	218935	1U99700-092	PLATE, STRIKE P46770
	209093	1U99700-031	PULL, DOOR P46159,160
	139301	1479290-001	RETAINER, WIRE TIE
	154385	2870929-003	RETAINER, WIRE SADDLE
	201958	2G49001-501	SCREEN & FRAME P46100, 150
	207091	2G49002-501	SCREEN & FRAME P46101, 130,151,159,160,727, 728,729,730,46GW939
	225063	2G49005-501	SCREEN & FRAME M46GE944 P46725,726,46GW943, 944
	225805	2G49005-502	SCREEN & FRAME P46731
	225816	2G49005-503	SCREEN & FRAME P46732
	226495	2G49005-504	SCREEN & FRAME P46738
	218832	2G49004-540	SCREEN & FRAME P46770
	201959	2G49001-502	SCREEN & FRAME 46GW950
	209055	2G49002-502	SCREEN & FRAME 46GW940, 941,951,952
	204929	1Z10002-01A	SCREWS, UPPER BACK P46100,150,46GW950
	176009	1444292-008	SCREW, 10-16 X .5 HL
	205508	2876411-002	SCREW, 10-16 X 1 HL
	228944	2R21006-01A	SHIELD, SCREEN P46738
	209095	1U99700-052	SLIDE, LOWER DOOR TRACK P46159,160
	209094	1U99700-051	SLIDE, UPPER DOOR TRACK P46159,160
	204932	1U99700-013	SOCKET, BAFFLE RETAINER P46100,150
	203083	2Q23001-01B	SPRING, SCREEN MTG
	154397	2870460-001	SUPPORT, CABLE CLIP
	225796	2813700-039	SUPPORT, SHELF P46725, 731,732,46GW943,944
	180147	903420-032	TAPE, CLAMP 1 IN WIDE
	233069	2G21031-06A	TRANSMITTER, REMOTE CRK84C2 M46GE944,46GW944DX2, LG2
	197461	2G21004-502	TRANSMITTER, REMOTE CRK59B P46100,101
	197460	2G21004-501	TRANSMITTER, REMOTE CRK59A P46130,150
	210671	2G21009-504	TRANSMITTER, REMOTE CRK62A2 P46151,159,160,770
	224262	2G21029-06A	TRANSMITTER, REMOTE CRK74F1 P46725,726
	211685	2G21004-521	TRANSMITTER, REMOTE CRK59K P46727
	212234	2G21009-505	TRANSMITTER, REMOTE CRK62B3 P46728,729,730,731, 732,738

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	197462	2G21004-503	TRANSMITTER, REMOTE CRK59C 46GW939,940,941,950, 951
	228005	2G21031-03A	TRANSMITTER, REMOTE CRK84C1 46GW943,944LG1
	204940	2G21004-518	TRANSMITTER, REMOTE CRK59G 46GW952
	203080	1C57101-01A	* YOKE
	210912	2G27011-501	* YOKE, P46130,151CG2, DG2,160,727,730,770, 46GW939,940,941
	226512	2G27011-502	* YOKE, M46GE944,P46725, 726,731,732,738, 46GW943,944LG1
	236576	XX15195-410	* YOKE, 46GW944DX2,LG2

P46720BADX1
P46720BADX2
P46720BALG1
P46720BALG2
P46720LVLG1
P46720LVLG2
P46721BADX1
P46721BADX2
P46721LVLG1
P46721LVLG2

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
CPT	225806	2G48002-524	* PICTURE TUBE ASSEMBLY RED, W/HEAT SINK, LENS ELEMENT & ANODE LEAD
CPT	225807	2G48002-525	* PICTURE TUBE ASSEMBLY GREEN, W/HEAT SINK, LENS ELEMENT & ANODE LEAD
CPT	225808	2G48002-526	* PICTURE TUBE ASSEMBLY BLUE, W/HEAT SINK, LENS ELEMENT & ANODE LEAD
SPKR	225810	XX15048-000	SPEAKER 5 X 7 IN 8 OHM 5W
	BK1736	XX15050-82A	* BACK, COVER LOWER
	BK2067	XX15139-960	BACK, UPPER
		XX15133-510	BOOK, INSTRUCTION
		XX15133-520	BOOK, INSTRUCTION (FRENCH)
	229651	1U99700-104	BUSHING, RUBBER
	236562	XX15124-500	BUTTON, CAP
	236561	XX15136-210	BUTTON, CLUSTER
	236563	XX15124-510	BUTTON, POWER
	187802	XX10004-170	* CABLE, AC POWER
	237914	XX15189-890	CABLE, FOCUS/SCREEN ASY DX2,LG2
	225798	XX15051-070	CASTER, FIXED
	203524	6R54001-01A	CASTER, SWIVEL
	231576	2R05016-01A	COVER, CONVERGENCE
	237915	XX15224-980	* COVER, HV SPLITTER PLUG DX2,LG2
	204809	2G36013-528	* FOCUS/SCREEN ASY DX1,LG1
	237913	XX15219-400	* FOCUS/SCREEN ASY DX2,LG2
	223221	XX20481-460	GASKET, ANODE LEADS
	223222	XX50896-620	GASKET, FOCUS LEAD
	236573	XX15150-080	GRILLE, SPEAKER
	205064	XX40431-090	* HV SPLITTER ASY
	236577	XX15143-340	LENS, FOR TUBE
	226548	6P92002-16A	LOGO, RCA
	236575	XX15177-290	MIRROR
	233126	XX15089-000	NUT, 3/8 -32
	139301	1479290-001	RETAINER, WIRE TIE
	154385	2870929-003	RETAINER, WIRE SADDLE

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	236574	XX15187-260	SCREEN
	236578	XX15136-440	SHIELD, SCREEN P46721
	224262	2G21029-06A	TRANSMITTER, REMOTE CRK74F1
	236576	XX15195-410	* YOKE

M52732EG1
M52732EG2
P52100EBLG1
P52150CPD01
P52150CPD02
P52150CPN01
P52150CPN02
P52151WKCG1
P52151WKDG1
P52152STCG1
P52152STDG1
P52725SKDX1
P52730CKLG1
P52731WKLG1
P52732BADX1
P52732BALG1
P52738WKLG1
P52750WKLG1
P52753ATLG1
P52755STDX1
P52755STLG1
P52756SBDX1
P52756SBDX2
P52756SBLG1
P52756SBLG2
P52770EBDX1
P52770EBDX2
P52770EBLG1
P52770EBLG2
PS52650DX1
PS52650LG1
PS52652DX1
PS52652LG1

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
CPT	201955	2G48001-531	* PICTURE TUBE ASSEMBLY RED, W/HEATSINK, LENS ELEMENT & ANODE LEAD P52150
CPT	201954	2G48001-522	* PICTURE TUBE ASSEMBLY GREEN, W/HEATSINK, LENS ELEMENT & ANODE LEAD P52150
CPT	201956	2G48001-533	* PICTURE TUBE ASSEMBLY BLUE, W/HEATSINK, LENS ELEMENT & ANODE LEAD P52150
CPT	209057	2G48001-534	* PICTURE TUBE ASSEMBLY RED, W/HEATSINK, LENS ELEMENT & ANODE LEAD P52151,152,730, 750,755
CPT	208648	2G48001-525	* PICTURE TUBE ASSEMBLY GREEN, W/HEATSINK, LENS ELEMENT & ANODE LEAD P52151,152,730, 750,755
CPT	209058	2G48001-536	* PICTURE TUBE ASSEMBLY BLUE, W/HEATSINK, LENS ELEMENT & ANODE LEAD P52151,152,730, 750,755
CPT	226510	2G48002-534	* PICTURE TUBE ASSEMBLY RED, W/HEATSINK, LENS ELEMENT & ANODE LEAD M52732,P52100, 725,731,732,738,753, 756,PS52650
CPT	225807	2G48002-525	* PICTURE TUBE ASSEMBLY GREEN, W/HEATSINK, LENS ELEMENT & ANODE LEAD M52732,P52100, 725,731,732,738,753, 756,PS52650
CPT	226511	2G48002-536	* PICTURE TUBE ASSEMBLY BLUE, W/HEATSINK, LENS ELEMENT & ANODE LEAD M52732,P52100, 725,731,732,738,753, 756,PS52650

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
CPT	224753	2G48001-594	* PICTURE TUBE ASSEMBLY RED, W/HEATSINK, LENS ELEMENT & ANODE LEAD P52770,PS52652
CPT	224754	2G48001-585	* PICTURE TUBE ASSEMBLY GREEN, W/HEATSINK, LENS ELEMENT & ANODE LEAD P52770,PS52652
CPT	224755	2G48001-596	* PICTURE TUBE ASSEMBLY BLUE, W/HEATSINK, LENS ELEMENT & ANODE LEAD P52770,PS52652
SPKR1	225823	XX15049-430	SPEAKER 90MM 8 OHM 20W P52100,PS52650
SPKR1	202434	1B70103-03A	SPEAKER 5 IN 8 OHM 10W P52150
SPKR1	204951	XX48063-800	SPEAKER 130MM 8 OHM 25W P52151,750,753,756,770
SPKR1	214725	XX50903-040	SPEAKER 80 X 160MM 16 OHM 20W P52152,755 PS52652
SPKR1	187964	1B70103-01A	SPEAKER 5 IN 8 OHM 10W P52730
SPKR1	225810	XX15048-000	SPEAKER 5 X 7 IN 8 OHM 5W M52732,P52725,731,732,738
SPKR2	202433	1B70100-02A	SPEAKER 2 IN 8 OHM 10W P52150
SPKR2	205260	XX48036-600	SPEAKER 51MM 8 OHM 20W P52151,152,750,753,755,756,770,PS52650,652
SPKR2	183168	1B70100-01A	SPEAKER 2 IN 8 OHM 10W P52730
SPKR3	210908	XX20439-190	SPEAKER 170MM 8 OHM 20W PS52650
	189263	1468109-003	ADAPTER, 75/300 OHM
	BK1223	8R52008-02D	* BACK, LOWER P52150
	BK1335	8R52008-08A	* BACK, LOWER P52151,730,750
	BK1428	8R52008-10A	* BACK, LOWER P52152,755
	BK1736	XX15050-82A	* BACK, LOWER M52732,P52100,725,731,732,753,738
	BK1769	XX15050-83A	* BACK, LOWER P52756DX1,LG1
	BK1842	XX15083-490	* BACK, LOWER P52756DX2,LG2
	BK1481	8R01056-01A	* BACK, LOWER P52770
	BK1798	XX15051-78A	* BACK, LOWER PS52650
	BK1588	8R01056-02A	* BACK, LOWER PS52652
	BK1775	XX15053-540	* BACK, UPPER P52100
	BK1209	8R01014-01A	* BACK, UPPER P52150
	BK1334	8R01014-02A	* BACK, UPPER P52151
	BK1427	2G30069-W1A	* BACK, UPPER P52152,755
	BK1480	2G04025-D1A	* BACK, UPPER P52730,750
	BK1774	XX15061-990	* BACK, UPPER M52732,P52725,731,732,738
	BK1731	XX15049-860	* BACK, UPPER P52753,PS52650
	BK1770	XX15047-790	* BACK, UPPER P52756
	BK1482	2G04025-B2A	* BACK, UPPER P52770
	BK1587	2G04025-B3A	* BACK, UPPER PS52652
	182820	2833709-001	BAFFLE, SPEAKER MTG
	205071	8R55106-009	BAFFLE, W/CLOTH P52150
	209097	1U99770-017	BAFFLE, W/CLOTH P52151
	218535	6R65006-01A	BAFFLE, W/CLOTH P52730
	226547	6R65014-01A	BAFFLE, W/CLOTH M52732,P52725,731,732,738
	218539	6R65007-01A	BAFFLE, W/CLOTH P52750
	226513	6R65014-02A	BAFFLE, W/CLOTH P52753
	226520	XX15048-37A	BAFFLE, W/CLOTH P52756
		XX15121-790	BOOK, INSTRUCTION (ENG/SPA) M52732
		1Q57498-01A	BOOK, INSTRUCTION P52100
		1Q57498-F1A	BOOK, INSTRUCTION (FRENCH) P52100
		1Q57150-01A	BOOK, INSTRUCTION P52150D01,N01
		1Q57150-02A	BOOK, INSTRUCTION P52150D02,N02
		1Q57200-01A	BOOK, INSTRUCTION (FRENCH) P52150D01,D02
		1Q57182-01A	BOOK, INSTRUCTION P52151
		1Q57246-01A	BOOK, INSTRUCTION (FRENCH) P52151
		1Q57332-05A	BOOK, INSTRUCTION P52152
		1Q57332-F5A	BOOK, INSTRUCTION (FRENCH) P52152
		1Q57496-01B	BOOK, INSTRUCTION P52725
		1Q57496-F1B	BOOK, INSTRUCTION (FRENCH) P52725
		1Q57375-05A	BOOK, INSTRUCTION P52730,731,738
		1Q57375-F5A	BOOK, INSTRUCTION (FRENCH) P52730,731,738
		XX15082-860	BOOK, INSTRUCTION P52732
		XX15082-870	BOOK, INSTRUCTION (FRENCH) P52732
		1Q57371-05A	BOOK, INSTRUCTION P52750,753,755,756DX1 LG1,770
		1Q57371-F5A	BOOK, INSTRUCTION (FRENCH) P52750,753,755,756,770
		1Q57598-01A	BOOK, INSTRUCTION PS52650
		1Q57598-F1A	BOOK, INSTRUCTION (FRENCH) PS52650
		1Q57349-01B	BOOK, INSTRUCTION PS52652
		1Q57349-F1B	BOOK, INSTRUCTION (FRENCH) PS52652
		XX15083-320	BOOK, INSTRUCTION P52756DX2,LG2
	226541		BRACKET, LEVELER P52100
	218536	6Q15040-05A	BRACKET, SCREEN FRAME LOCK P52100,730,750
	208646	6Q15040-01A	BRACKET, SCREEN FRAME LOCK P52151
	214770	6Q15049-01A	BRACKET, SCREEN FRAME LOCK P52152,755,PS52652
	225804	XX15048-260	BRACKET, SCREEN FRAME LOCK M52732,P52725,731,732,738,753,PS52650
	203073	2G30024-E1C	BUTTONS, P52150
	225801	6R12005-01A	BUTTON, CAP M52732,P52100,725,731,732,738,753,756,PS52650
	225802	6R12005-02A	BUTTON, POWER CAP M52732,PS52100,725,731,732,738,753,756,PS52650
	225803	XX15048-280	BUTTON, CLUSTER M52732,P52100,725,731,732,738,753,756,PS52650
	187802	XX10004-170	* CABLE, AC POWER
	237914	XX15189-890	CABLE, FOCUS/SCREEN ASY M52732EG2
	224416	2G36013-549	CABLE, P3404/P3001
	204810	2G36013-522	CABLE, P4701/P4702
	233020	2G36013-583	CABLE, P6106/P5001R
	233021	2G36013-584	CABLE, P6107/P5001G
	233022	2G36013-585	CABLE, P6108/P5001B
	205186	2G36012-562	CABLE, P6401/P8003
	205187	2G36012-563	CABLE, P6402/P8002
	205188	2G36012-564	CABLE, P6403/P8001
	204816	2G36013-516	CABLE, P6404/P8203
	204814	2G36013-518	CABLE, P7005/P8104
	204817	2G36013-511	CABLE, P7006
	204813	2G36013-519	CABLE, P7013/P5001B

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	204812	2G36013-520	CABLE, P7014/P5001G
	204811	2G36013-521	CABLE, P7015/P5001R
	204815	2G36013-517	CABLE, P7019/P8202
	205924	2G36013-512	CABLE, SPEAKER
	202435	XX60409-824	CAP LYTC 1UF 25V NP
	184114	XX15000-990	CAP LYTC 2.2UF 35V NP
	178094	1471040-014	CAP LYTC 10UF 25V NP
	210610		CASTER, FIXED P52152, 755
	225798	XX15051-070	CASTER, FIXED P52753, 756,PS52650
	203524	6R54001-01A	CASTER, SWIVEL
	226542	8R14015-01A	CIRCUIT, CROSSOVER P52100
	205524	2F26003-501	CIRCUIT, CROSSOVER P52151,750,753,756, 770
	214724	2F26003-508	CIRCUIT, CROSSOVER P52152
	227514	2F26019-502	CIRCUIT, CROSSOVER PS52650
	215963		CLIP, GRILLE MTG P52152 755,PS52652
	215965		CLIP, PANEL MTG P52152, 755
	250047	XX50757-600	CONNECTOR, SPKR
	226509	XX15051-100	COVER, CONVERGENCE M52732,P52100,725, 731,732,753,PS52652
	237915	XX15224-980 *	COVER, HV SPLITTER PLUG M52732EG2
	210222	6Q31002-08A	CUSHION, FOR SCREEN (3)
	218123	1U99700-078	FASTENER, VELCRO FOR GRILLE
	225797	1U99700-026	FASTENER, VELCRO FOR GRILLE P52753
	237913	XX15219-400 *	FOCUS/SCREEN ASY M52732EG2
	223663	2G36013-578 *	FOCUS/SCREEN ASY P52770,PS52652
	204809	2G36013-528 *	FOCUS/SCREEN ASY
	226540		FOOT, LEVELER P52100
	223221	XX20481-460	GASKET, ANODE LEADS
	223222	XX50896-620	GASKET, FOCUS LEAD
	218939	2873873-21A	GLASS, DOOR P52770
	221055	2873873-22A	GLASS, DOOR PS52652
	215960		GRILLE, LEFT P52152,755
	215961		GRILLE, RIGHT P52152, 755
	226779	XX15051-910	GRILLE, LEFT PS52650
	226778	XX15051-860	GRILLE, RIGHT PS52650
	221052		GRILLE, LEFT PS52652
	221053		GRILLE, RIGHT PS52652
	203077	1P40001-01A	GROMMET, BACK COVER
	203078	1P40002-01A	GROMMET, MIRROR
	218940		HINGE, DOOR 1 PR P52770
	212226		HINGE, DOOR 1 PR PS52652
	200216	8R10006-01B *	HOUSING, FOCUS
	204906	XX55126-100	HOUSING, FOCUS COLLAR
	204907	XX70362-100	HOUSING, HV IN COLLAR
	204908	XX90504-300	HOUSING, HV OUT COLLAR
	205064	XX40431-090 *	HV SPLITTER ASY
	203067	8Q02001-01B *	INSULATOR, HEAT BARRIER
	218941		LATCH, DOOR P52770
	211032		LATCH, DOOR PS52652
	201957	6P98001-01A *	LENS, FOR TUBE
	226491	6P98002-01A *	LENS, FOR TUBE P52750, 755,770,PS52652
	225809	XX15046-900 *	LENS, FOR TUBE M52732EG1,P52100,725, 731,732,738,753,756, PS52650
	236577	XX15143-340 *	LENS, FOR TUBE M52732EG2
	250045	6R23005-01A *	LENS, LED/LDR
	210777	6P92002-08A	LOGO, PROSCAN
	226548	6P92002-16A	LOGO, RCA P52731
	215962	2G30053-Z1A	LOGO, RCA P52152,755
	209091	6P92003-02A	LOGO, SOUND RETRIEVAL P52152,755
	225799	6R31002-01A	LOGO, SRS M52732, P52725,731,732,738, 753
	221054	6P92003-01A	LOGO, SURROUND SOUND PS52652
	201962	6P96002-01A	MIRROR
	226549	XX15053-510	MIRROR, M52732,P52100, 725,731,732,738
	226515	XX15050-140	MIRROR, P52753,PS52650
	226522	XX15048-230	MIRROR, P52756
	218736	8P96001-01A	MIRROR, P52770,PS52652
	208650	6P43002-01A	NUT, WING UPPER BACK P52151,730,755,770, PS52652
	204888	2G30029-A1C	OVERLAY, LEFT
	203079	6R06008-01C *	OVERLAY, RIGHT
	218735	8R16022-01A	OVERLAY, CENTER SPEAKER P52770DX1,LG1
	218734	8R16019-02A	OVERLAY, LEFT SPEAKER P52770DX1,LG1
	218733	8R16019-01A	OVERLAY, RIGHT SPEAKER P52770DX1,LG1
	221157	8R16022-02A	OVERLAY, CENTER SPEAKER P52770DX2,LG2
	221158	8R16019-04A	OVERLAY, LEFT SPEAKER P52770DX2,LG2
	221159	8R16019-03A	OVERLAY, RIGHT SPEAKER P52770DX2,LG2
	226538	2G30053-Q8A	PANEL, CONTROL P52100, PS52650
	204889	2G30029-Y1B	PANEL, CONTROL P52150
	207090	2G30053-P1A	PANEL, CONTROL P52151
	214769	2G30053-P5A	PANEL, CONTROL P52152, 755
	218533	2G30089-P1A	PANEL, CONTROL P52730, 750,770,PS52652
	226545	2G30053-Q5A	PANEL, CONTROL M52732, P52725,731,732,738
	225800	2G30053-Q4A	PANEL, CONTROL P52753
	226518	2G30053-Q1C	PANEL, CONTROL P52756
	215944		PANEL, DOOR P52152,755
	232228	XX15051-790	PANEL, DOOR PS52650
	207485	4Q03004-01B	PANEL, FPA SUPPORT
	203068		PIN, GRILLE MTG
	205545	8R15002-01A *	PLATE, SPKR MTG P52151,750,753,756, 770
	212225		PLATE, STRIKE P52770, PS52652
	139301	1479290-001	RETAINER, WIRE TIE
	154385	2870929-003	RETAINER, WIRE SADDLE
	226550	2G49005-515	SCREEN & FRAME P52100
	201960	2G49001-511	SCREEN & FRAME P52150
	210150	2G49002-511	SCREEN & FRAME P52151
	214726	2G49003-501	SCREEN & FRAME P52152, 755
	218534	2G49004-505	SCREEN & FRAME P52730, 750
	226546	2G49005-512	SCREEN & FRAME M52732, P52725,731,732
	227507	2G49005-516	SCREEN & FRAME P52738
	226505	2G49005-513	SCREEN & FRAME P52753
	226519	2G49005-511	SCREEN & FRAME P52756
	218732	8P97002-07A	SCREEN & FRAME P52770
	226777	2G49005-514	SCREEN & FRAME PS52650
	221051	2G49003-502	SCREEN & FRAME PS52652
	204929	1Z10002-01A	SCREWS, BACK P52150
	215964		SCREW, BALL HEAD GRILLE MTG P52152,755,PS52652
	176012	2860093-002	SCREW, 8-18 X 1 TAPPING W/WASHER
	176009	1444292-008	SCREW, 10-16 X .5 HL
	205508	2876411-002	SCREW, 10-16 X 1 HL
	228945	2R21006-02A	SHIELD, SCREEN P52738
	210900	8R67002-02A	SHELF, ACCESSORY P52152 755
	226521	2G30053-V2A	SHELF, VCR P52756
	203083	2Q23001-01B	SPRING, SCREEN MTG
	154397	2870460-001	SUPPORT, CABLE CLIP
	225796	2813700-039	SUPPORT, SHELF P52753
	212222		SUPPORT, SHELF P52770
	207926		SUPPORT, SHELF PS52652

REPLACEMENT PARTS (Continued)

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SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	180147	903420-032	TAPE, CLAMP 1 IN WIDE
	197460	2G21004-501	TRANSMITTER, REMOTE CRK59A P52150
	210671	2G21009-504	TRANSMITTER, REMOTE CRK62A2 P52100,151,152,750, 753,755,756DX1,LG1,770
	224262	2G21029-06A	TRANSMITTER, REMOTE CRK74F1 P52725
	210672	2G21009-505	TRANSMITTER, REMOTE CRK62B3 P52730
	225838	2G21025-04A	TRANSMITTER, REMOTE CRK70D1 M52732,P52731,732,738
	206799	2G21008-501	TRANSMITTER, REMOTE CRK60A PS52650,652
	212236	2G21009-507	TRANSMITTER, REMOTE CRK62D PS52650,652
	225841	2G21025-07A	TRANSMITTER, REMOTE CRK70G1 P52756DX2,LG2
	203080	1C57101-01A	* YOKE, P52150
	210912	2G27011-501	* YOKE, P52151,152,730, 750,770,PS52652
	226512	2G27011-502	* YOKE, M52732EG1,P52100, 725,731,732,738,753, 756,PS52650
	236576	XX15195-410	* YOKE, M52732EG2

P52720BADX1
P52720BADX2
P52720BALG1
P52720BALG2
P52720LVLG1
P52720LVLG2
P52721BADX1
P52721BADX2
P52721LVLG1
P56720LVLG2

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
CPT	226510	2G48002-534	* PICTURE TUBE ASSEMBLY RED, W/HEATSINK, LENS ELEMENT & ANODE LEAD P52720,721
CPT	225807	2G48002-525	* PICTURE TUBE ASSEMBLY GREEN, W/HEATSINK, LENS ELEMENT & ANODE LEAD P52720,721
CPT	226511	2G48002-536	* PICTURE TUBE ASSEMBLY BLUE, W/HEATSINK, LENS ELEMENT & ANODE LEAD P52720,721
CPT	226527	2G48002-544	* PICTURE TUBE ASSEMBLY RED, W/HEATSINK, LENS ELEMENT & ANODE LEAD P56720
CPT	225807	2G48002-525	* PICTURE TUBE ASSEMBLY GREEN, W/HEATSINK, LENS ELEMENT & ANODE LEAD P56720
CPT	226528	2G48002-546	* PICTURE TUBE ASSEMBLY BLUE, W/HEATSINK, LENS ELEMENT & ANODE LEAD P56720
SPKR1	225810	XX15048-000	SPEAKER 5 X 7 IN 8 OHM 5W
	BK1736	XX15050-82A	* BACK, LOWER

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	BK2065	XX15139-970	BACK, UPPER
		XX15133-510	BOOK, INSTRUCTION
		XX15133-520	BOOK, INSTRUCTION (FRENCH)
	236565	1U99700-144	BUSHING, RUBBER
	236562	XX15124-500	BUTTON, CAP
	236561	XX15136-210	BUTTON, CLUSTER
	236563	XX15124-510	BUTTON, POWER
	187802	XX10004-170	* CABLE, AC POWER
	237914	XX15189-890	CABLE, FOCUS/SCREEN ASY P52720DX2,LG2,721DX2, LG2,P56720
	225798	XX15051-070	CASTER, FIXED
	203524	6R54001-01A	CASTER, SWIVEL
	231576	2R05016-01A	COVER, CONVERGENCE
	237915	XX15224-980	COVER, HV SPLITTER PLUG P52720DX2,LG2,721DX2, LG2,P56720
	204809	2G36013-528	* FOCUS/SCREEN ASY P52720DX1,LG1,721DX1, LG1
	237913	XX15219-400	* FOCUS/SCREEN ASY P52720DX2,LG2,721DX2, LG2,P56720
	223221	XX20481-460	GASKET, ANODE LEADS
	223222	XX50896-620	GASKET, FOCUS LEAD
	236564	XX15141-770	GRILLE, SPEAKER P52720, 721
	237927	XX15179-300	GRILLE, SPEAKER P56720
	205064	XX40431-090	* HV SPLITTER ASY
	236127	XX15119-290	* LENS, FOR TUBE P52720, 721
	237929	XX15119-270	* LENS, FOR TUBE P56720
	226548	6P92002-16A	LOGO, RCA
	236566	XX15177-300	MIRROR, P52720,721
	237494	XX15177-310	MIRROR, P56720
	233126	XX15089-000	NUT, 3/8-32
	154385	2870929-003	RETAINER, WIRE SADDLE
	139301	1479290-001	RETAINER, WIRE TIE
	205508	2876411-002	SCREW, 10-16 X 1 HL
	232271	8P97002-11A	SCREEN, P52720
	237928	XX15137-420	SCREEN, P56720
	236572	XX15136-420	SCREEN & SHIELD P52721
	237590	XX15137-370	SHIELD, SCREEN P52721
	154397	2870460-001	SUPPORT, CABLE CLIP
	224262	2G21029-06A	TRANSMITTER, REMOTE CRK74F1
	226512	2G27011-502	* YOKE, P52720DX1,LG1, 721DX1,LG1
	236576	XX15195-410	* YOKE, P52720DX2,LG2, 721DX2,LG2,P56720

P60100EBLG1
P60152CKCG1
P60153EBLG1
P60750CKLG1
P60751EBDX1
P60751EBLG1
P60752EBDX1
P60752EBLG1
P60752EBLG2

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
CPT	215223	2G48001-544	* PICTURE TUBE ASSEMBLY RED, W/HEATSINK, LENS ELEMENT & ANODE LEAD P60152,153,750,751
CPT	208648	2G48001-525	* PICTURE TUBE ASSEMBLY GREEN, W/HEATSINK, LENS ELEMENT & ANODE LEAD P60152,153,750,751

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
CPT	215224	2G48001-546	* PICTURE TUBE ASSEMBLY BLUE, W/HEATSINK, LENS ELEMENT & ANODE LEAD P60152,153,750,751
CPT	226527	2G48002-544	* PICTURE TUBE ASSEMBLY RED, W/HEATSINK, LENS ELEMENT & ANODE LEAD P60100,752
CPT	225807	2G48002-525	* PICTURE TUBE ASSEMBLY GREEN, W/HEATSINK, LENS ELEMENT & ANODE LEAD P60100,752
CPT	226528	2G48002-546	* PICTURE TUBE ASSEMBLY BLUE, W/HEATSINK, LENS ELEMENT & ANODE LEAD P60100,752
SPKR1	225823	XX15049-430	SPEAKER 90MM 8 OHM 20W P60100
SPKR1	214725	XX50903-040	SPEAKER 80 X 160MM 16 OHM 20W P60152,153,750,751
SPKR1	204951	XX48063-800	SPEAKER, 130MM 8 OHM 25W P60752
SPKR2	205260	XX48036-600	SPEAKER 51MM 8 OHM 20W
	BK1736	XX15050-82A	* BACK, LOWER P60100
	BK1773	XX15053-530	* BACK, UPPER P60100
	BK1429	8R52008-11A	* BACK, LOWER P60152,153, 750,751
	BK1425	8R01016-01B	* BACK, UPPER P60152,153, 750,751
	BK1772	XX15051-77A	* BACK, LOWER P60752
	BK1771	XX15049-85A	* BACK, UPPER P60752
	226520	XX15048-37A	BAFFLE, W/CLOTH P60752
		XX15083-30A	BOOK, INSTRUCTION P60100,752
		XX15083-310	BOOK, INSTRUCTION (FRENCH) P60100,752
		1Q57332-05A	BOOK, INSTRUCTION P60152,153
		1Q57332-F5A	BOOK, INSTRUCTION (FRENCH) P60152,153
		1Q57371-05A	BOOK, INSTRUCTION P60750,751
		1Q57371-F5A	BOOK, INSTRUCTION (FRENCH) P60750,751
	226541		BRACKET, LEVELER P60100
	215227	6Q15040-03A	BRACKET, SCREEN FRAME LOCK P60100,152,153, 750,751
	225801	6R12005-01A	BUTTON, CAP P60100,752
	225802	6R12005-02A	BUTTON, POWER CAP P60100,752
	225803	XX15048-280	BUTTON, SHAFT P60100, 752
	187802	XX10004-170	* CABLE, AC POWER
	237914	XX15189-890	CABLE, FOCUS/SCREEN ASY P60752LG2
	224416	2G36013-549	CABLE, P3404/P3001
	204810	2G36013-522	CABLE, P4701/P4702
	205186	2G36012-562	CABLE, P6401/P8003
	205187	2G36012-563	CABLE, P6402/P8002
	205188	2G36012-564	CABLE, P6403/P8001
	204816	2G36013-516	CABLE, P6404/P8203
	204814	2G36013-518	CABLE, P7005/P8104
	204817	2G36013-511	CABLE, P7006
	204813	2G36013-519	CABLE, P7013/P5001B
	204812	2G36013-520	CABLE, P7014/P5001G
	204811	2G36013-521	CABLE, P7015/P5001R
	204815	2G36013-517	CABLE, P7019/P8202
	225798	XX15051-070	CASTER, FIXED
	203524	6R54001-01A	CASTER, SWIVEL
	226542	8R14015-01A	CIRCUIT, CROSSOVER P60100
	214724	2F26003-508	CIRCUIT, CROSSOVER P60152,153,750,751
	205524	2F26003-501	CIRCUIT, CROSSOVER P60752
	215965		CLIP, GRILLE MTG
	226509	XX15051-100	COVER, CONVERGENCE P60100
	237915	XX15224-980	* COVER, HV SPLITTER PLUG P60752LG2
	225797	1U99700-026	FASTENER, DUAL LOCK FOR GRILLE P60100
	204809	2G36013-528	* FOCUS/SCREEN ASY
	237913	XX15219-400	* FOCUS/SCREEN ASY P60752LG2
	226540		FOOT, LEVELER P60100
	223221	XX20481-460	GASKET, ANODE LEAD
	223222	XX50896-620	GASKET, FOCUS LEAD
	229031	XX15087-670	GRILLE, P60100
	216144		GRILLE, P60152,750
	216440		GRILLE, P60153,751
	203078	1P40002-01A	GROMMET, MIRROR
	200216	8R10006-01B	* HOUSING, FOCUS
	204906	XX55126-100	HOUSING, FOCUS COLLAR
	204907	XX70362-100	HOUSING, HV IN COLLAR
	204908	XX90504-300	HOUSING, HV OUT COLLAR
	205064	1B29200-01A	* HV SPLITTER ASY
	215962	2G30053-Z1A	LOGO, RCA P60152,750
	216439	2G30053-Z2A	LOGO, RCA P60153,751
	209091	6R31002-01A	LOGO, SOUND RETRIEVAL
	201957	6P98001-01A	* LENS, FOR TUBE P60152, 153,750,751
	226529	XX15050-050	* LENS, FOR TUBE P60100, 752DX1,LG1
	237929	XX15119-270	* LENS, FOR TUBE P60752LG2
	226543	XX15053-520	MIRROR, P60100
	214722	6P96003-01A	MIRROR P60152,153,750, 751
	226530	XX15048-220	MIRROR, P60752
	208650	6P43002-01A	NUT, WING UPPER BACK
	226538	2G30053-Q8A	PANEL, CONTROL P60100
	214769	2G30053-P5A	PANEL, CONTROL P60152, 750
	207090	2G30053-P1A	PANEL, CONTROL P60153, 751
	226518	2G30053-Q1C	PANEL, CONTROL P60752
	203068		PIN, GRILLE MTG
	205545	8R15002-01A	PLATE, SPKR MTG P60752
	139301	1479290-001	RETAINER, BEAD CHAIN
	154385	2870929-003	RETAINER, WIRE SADDLE
	226539	2G49002-525	SCREEN & FRAME ASY P60100
	215225	2G49002-523	SCREEN & FRAME ASY P60152,750
	218947	2G49002-524	SCREEN & FRAME ASY P60153,751
	226157	2G49005-521	SCREEN & FRAME ASY P60752
	205508	2876411-002	SCREW, 10-16 X 1 HL
	215226	8R67002-03A	SHELF, ACCESSORY P60152 750
	216441	8R67002-04A	SHELF, ACCESSORY P60153 751
	226526	8R67003-01A	SHELF, ACCESSORY P60752
	180147	903420-032	TAPE, CLAMP 1 IN WIDE
	225841	2G21025-07A	TRANSMITTER, REMOTE CRK70G1
	210912	2G27011-501	* YOKE, P60152,153,750, 751
	226512	2G27011-502	* YOKE, P60100,752DX1,LG1
	236576	XX15195-410	* YOKE, P60752LG2

RC5252 CABINET

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	BK1412		BACK, COVER
	212928		DOOR, GLASS
	212930		HINGE, LOWER
	212929		HINGE, UPPER
	210604		LATCH
	212225		PLATE, PUSH W/PAD
	212222		SUPPORT, SHELF 4/PKG

REPLACEMENT PARTS (Continued)

(See Product Safety Note on first page of this parts list)

RC5253 CABINET

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	218234		CASTER, SET OF 4
	224731		GLASS, DOOR
	208625		HINGE, DOOR W/PLATES
	224736		LATCH, MAGNETIC
	224740		PLATE, PUSH
	212222		SUPPORT, SHELF 4/PKG

RC5256 COMPONENT RACK

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	225763	1097896	BRACKET, SHELF
	225757	1107150	CASTER, FIXED (PAIR)
	225758	1013977	CASTER, SWIVEL (PAIR)
	225762	1097945	GROMMET KIT
	225759	1093463	HARDWARE KIT
	227516	1122185	TUBE, WIRE MANAGEMENT

PTV CUSTOM HOME THEATRE (USED WITH P46729,46732 P52100,52730,52755 P60100,60751)

HT46200FN
HT46203BD
HT46253BD
HT46300FN
HT46301FN
HT46203BT
HT46253BT
HT46302FN
HT46350FN
HT46400FN
HT46401FN
HT46402FN
HT46501FN
HT46502FN
HT46600FN
HT46800FN
HT46801FN
HT46802FN
HT46851FN
HT46852FN

HT52200FN
HT52203BD
HT52253BD
HT52300FN
HT52301FN
HT52302FN
HT52350FN
HT52400FN
HT52402FN
HT52501FN
HT52502FN
HT52600FN
HT52800FN
HT52801FN
HT52802FN
HT52851FN
HT52852FN

HT60203BD
HT60253BD
HT60300FN
HT60301FN
HT60302FN
HT60350FN
HT60400FN
HT60501FN
HT60502FN
HT60600FN
HT60800FN
HT60801FN
HT60802FN
HT60851FN
HT60852FN
HT60900BD
HT60902BD
HT60903BD
HT60952BD

INSTALLATION & HOOK-UP COMPONENTS

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	AH25		ADAPTER, Y PHONO-PHONO
	195974		* CABLE, AC POWER 8'
	231925		CABLE, AUDIO 6' MONSTER
	227513		CABLE, AUDIO 12' STANDARD
	231930		CABLE, AUDIO 12' MONSTER
	231924		CABLE, A/V 6' MONSTER
	231929		CABLE, A/V 12' MONSTER
	227373		CABLE, JACK PANEL EXT 15'
	231923		CABLE, RF 3' MONSTER
	227382		CABLE, RF 12' STANDARD
	231922		CABLE, RF 12' MONSTER
	229625		CABLE, RF 6"
	227385		CABLE, SPEAKER WIRE 100' 16 GA
	227387		CABLE, SUBWOOFER 3' STANDARD
	231927		CABLE, SUBWOOFER 3' MONSTER
	227386		CABLE, SUBWOOFER 12' STANDARD
	231926		CABLE, SUBWOOFER 12' MONSTER
	227388		CABLE, SUBWOOFER 40'
	211035		CATCH, MAGNETIC FOR DOORS
	231946		DOOR, GLASS W/LOGO
	231947		DOOR, GLASS W/O LOGO
	227372		FAN, HEAT DISSIPATION
	229626		FRAME, IN-WALL RACKS HT60900
	227384		FRAME, IN-WALL RACKS HT60902,903,952
	229627		FRAME, IN-WALL PTV HT60900
	227383		FRAME, IN-WALL PTV HT60902,903,952
	227510		GRILLE, HT52301,501 HT52801,851
	227511		GRILLE, HT60301,501 HT60801,851, HT60902,952
	231948		HINGE, GLASS DOOR
	229628		LEG, LEVELING HT60900
	231943		LEG, LEVELING HT60902, 903,952
	VH47		SPLITTER, 2 WAY
	229629		* STRIP, AC OUTLET (BUILT-IN) HT60900
	227381		* STRIP, AC OUTLET W/8' CABLE HT46203,253, HT52203,253, HT60203,253, 902,903,952
	231940		SUPPORT, SHELF
	227391		WALLPLATE, KIT FOR SUBWOOFER HT60900, 902,903,HT60952

SERVICE AIDS

SYMBOL NO.	STOCK NO.	DRAWING NO.	DESCRIPTION
	199349		KIT, SMD CAPACITORS 146 VALUES, 5 EA
	199350		KIT, SMD RESISTORS 302 VALUES, 5 EA
	199348		KIT, FAST MOVING COMPONENT PARTS
	199351		KIT, FAST MOVING COMPONENT PTV PARTS (INCLUDES KIT 199348)

CTC169(PTV)-S2
AUG91

PAPER SCHEMATICS

CTC169(PTV)

RCA/GE
Projection Television Supplemental Service Data

Thomson Consumer Electronics, Inc.
Technical Publications
P.O. Box 1976 | Indianapolis, Indiana 46206

Thomson Consumer Electronics Canada, Inc.
Technical Publications
6540 Tomken Road/Mississauga, Ont L5T 2E9

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** NOTE: Circuit Board Available on Microfiche only.

SAFETY NOTICE
USE ISOLATION TRANSFORMER WHEN SERVICING

Components having special safety characteristics are identified by stars ★ on schematics and on the parts list in this Service Data and its bulletins. Before servicing this instrument, it is important that the service technician read and follow the "Safety Precautions" and "Product Safety Notices" in the Basic Service Data.

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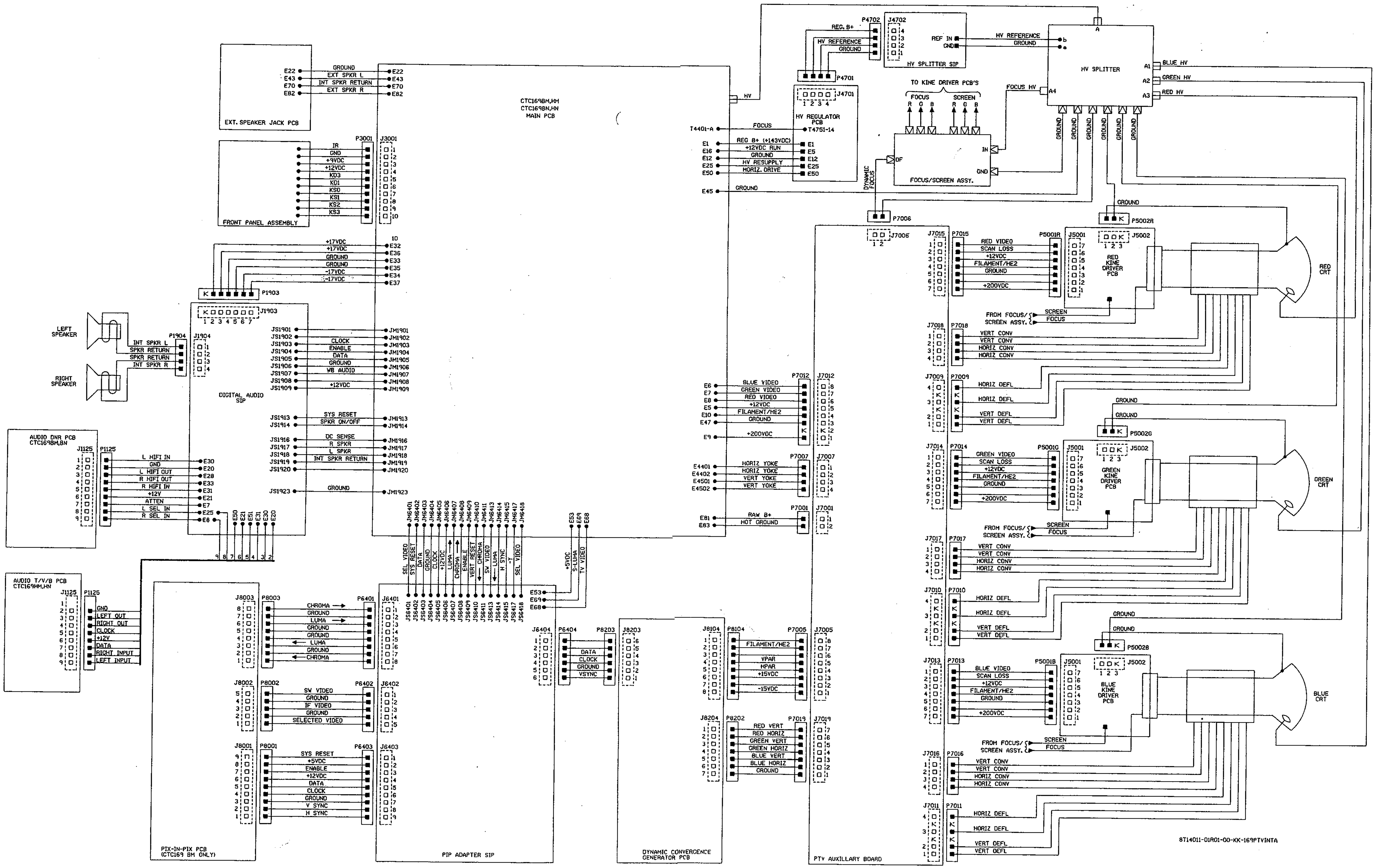
WA91-3003 JK

M-CTC169(PTV)-S2

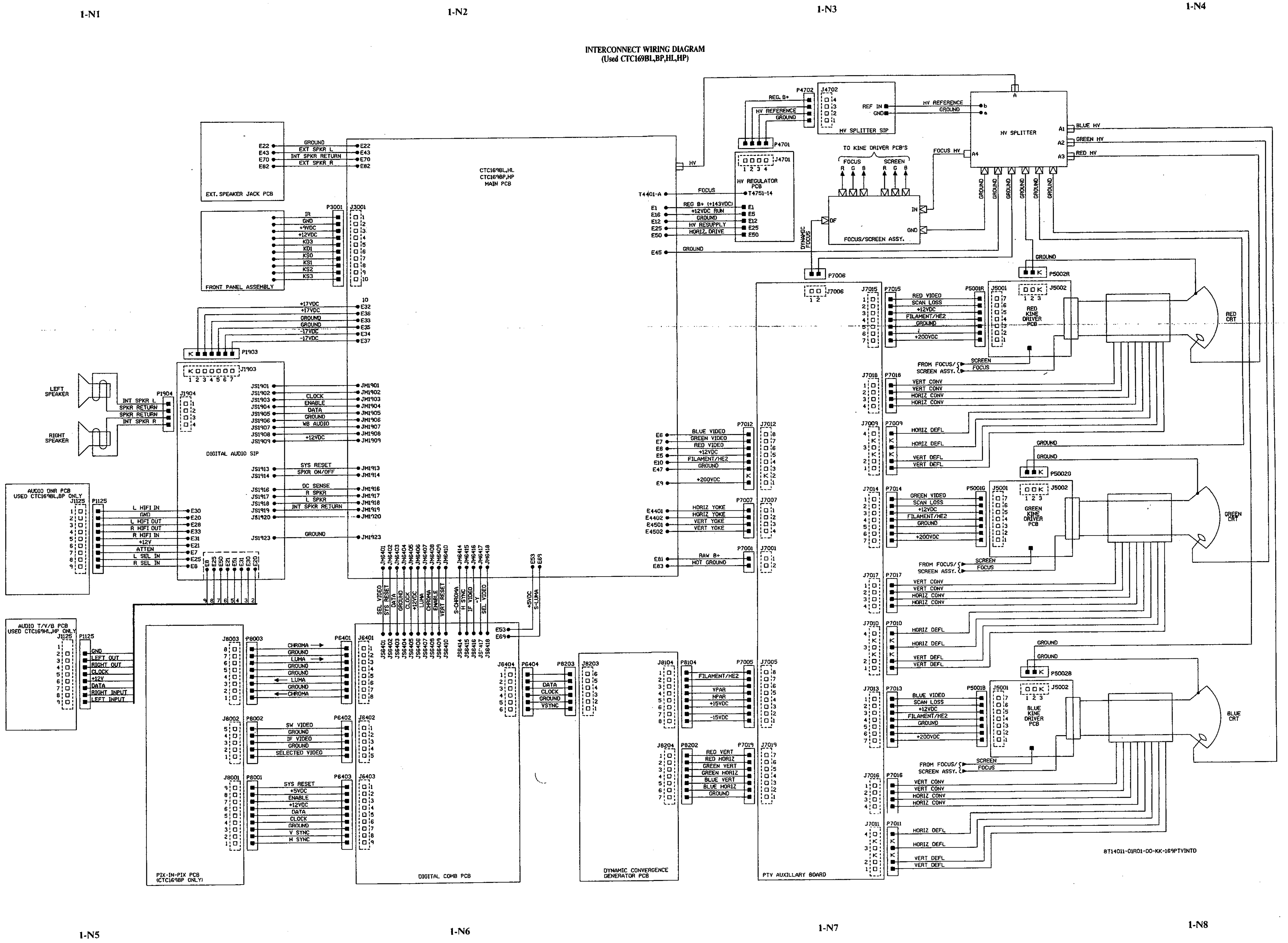
1-M1 1-M2 1-M3 1-M4

INTERCONNECT WIRING DIAGRAM (ANALOG COMB)
(Used CTC169BM,BN,HM,HN)

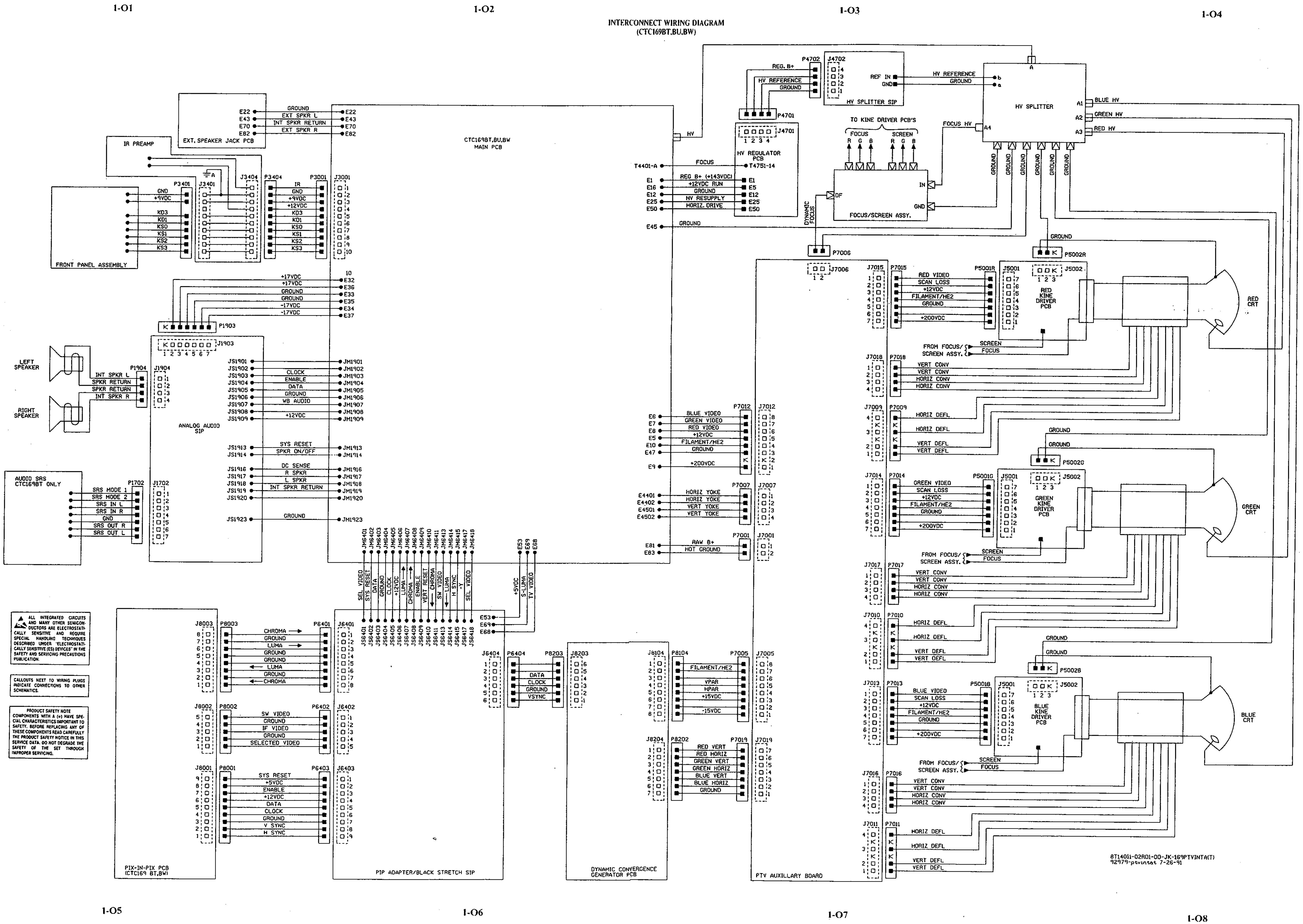

EXT. SPEAKER JACK PCB
GROUND
EXT SPKR L
INT SPKR RETURN
EXT SPKR R
FRONT PANEL ASSEMBLY
P3001
J3001
IR
GND
+9VDC
+12VDC
KD3
KD1
KS0
KS1
KS2
KS3
CTC169BM,HM
CTC169BN,HN
MAIN PCB
P1903
J1903
+17VDC
GROUND
-17VDC
LEFT SPEAKER
RIGHT SPEAKER
P1904
J1904
INT SPKR L
SPKR RETURN
INT SPKR R
DIGITAL AUDIO SIP
CLOCK
ENABLE
DATA
WB AUDIO
+12VDC
SYS RESET
SPKR ON/OFF
DC SENSE
R SPKR
L SPKR
AUDIO DNR PCB
CTC169BM,BN
J1125
P1125
L HIFI IN
L HIFI OUT
R HIFI OUT
R HIFI IN
+12V
ATTEN
L SEL IN
R SEL IN
AUDIO T/V/B PCB
CTC169HM,HN
LEFT OUT
RIGHT OUT
RIGHT INPUT
LEFT INPUT
PIX-IN-PIX PCB
(CTC169 BM ONLY)
J8003
P8003
P6401
J6401
CHROMA
LUMA
J8002
P8002
P6402
J6402
SW VIDEO
IF VIDEO
SELECTED VIDEO
J8001
P8001
P6403
J6403
+5VDC
V SYNC
H SYNC
PIP ADAPTER SIP
SEL VIDEO
VERT RESET
-Y
S-LUMA
TV VIDEO
J6404
P6404
P8203
J8203
VSYNC
DYNAMIC CONVERGENCE GENERATOR PCB
J8104
P8104
P7005
J7005
FILAMENT/HE2
VPAR
HPAR
+15VDC
-15VDC
J8204
P8202
P7019
J7019
RED VERT
RED HORIZ
GREEN VERT
GREEN HORIZ
BLUE VERT
BLUE HORIZ
PTV AUXILLARY BOARD
P7012
J7012
BLUE VIDEO
GREEN VIDEO
RED VIDEO
+200VDC
P7007
J7007
HORIZ YOKE
VERT YOKE
P7001
J7001
RAW B+
HOT GROUND
HV
FOCUS
REG B+ (+143VDC)
+12VDC RUN
HV RESUPPLY
HORIZ. DRIVE
HV REGULATOR PCB
J4701
P4701
REG. B+
HV REFERENCE
P4702
J4702
REF IN
GND
HV SPLITTER SIP
HV SPLITTER
BLUE HV
GREEN HV
RED HV
FOCUS HV
TO KINE DRIVER PCB'S
SCREEN
FOCUS/SCREEN ASSY.
DYNAMIC FOCUS
P7006
J7006
J7015
P7015
P5001R
J5001
J5002
SCAN LOSS
RED KINE DRIVER PCB
RED CRT
FROM FOCUS/SCREEN ASSY.
J7018
P7018
VERT CONV
HORIZ CONV
J7009
P7009
HORIZ DEFL
VERT DEFL
P5002R
P5002G
J7014
P7014
P5001G
GREEN KINE DRIVER PCB
GREEN CRT
J7017
P7017
J7010
P7010
P5002B
J7013
P7013
P5001B
BLUE KINE DRIVER PCB
BLUE CRT
J7016
P7016
J7011
P7011
8T14011-01R01-00-KK-169PTVINTA

1-M5 1-M6 1-M7 1-M8

INTERCONNECT WIRING DIAGRAM
(Used CTC169BL,BP,HL,HP)


1-N1
1-N2
1-N3
1-N4
1-N5
1-N6
1-N7
1-N8
EXT. SPEAKER JACK PCB
GROUND
EXT SPKR L
INT SPKR RETURN
EXT SPKR R
E22
E43
E70
E82
FRONT PANEL ASSEMBLY
P3001
J3001
IR
GND
+9VDC
+12VDC
KD3
KD1
KS0
KS1
KS2
KS3
CTC169BL,HL
CTC169BP,HP
MAIN PCB
+17VDC
GROUND
-17VDC
E32
E36
E33
E35
E34
E37
P1903
J1903
LEFT SPEAKER
RIGHT SPEAKER
P1904
J1904
INT SPKR L
SPKR RETURN
INT SPKR R
DIGITAL AUDIO SIP
CLOCK
ENABLE
DATA
GROUND
WB AUDIO
+12VDC
SYS RESET
SPKR ON/OFF
DC SENSE
R SPKR
L SPKR
INT SPKR RETURN
AUDIO DNR PCB
USED CTC169BL,BP ONLY
J1125
P1125
L HIFI IN
GND
L HIFI OUT
R HIFI OUT
R HIFI IN
+12V
ATTEN
L SEL IN
R SEL IN
AUDIO T/V/B PCB
USED CTC169HL,HP ONLY
LEFT OUT
RIGHT OUT
RIGHT INPUT
LEFT INPUT
PIX-IN-PIX PCB
(CTC169BP ONLY)
J8003
P8003
P6401
J6401
CHROMA
LUMA
J8002
P8002
P6402
J6402
SW VIDEO
IF VIDEO
SELECTED VIDEO
J8001
P8001
P6403
J6403
+5VDC
V SYNC
H SYNC
DIGITAL COMB PCB
SEL VIDEO
VERT RESET
S-CHROMA
-Y
S-LUMA
E53
E69
J6404
P6404
P8203
J8203
VSYNC
DYNAMIC CONVERGENCE GENERATOR PCB
J8104
P8104
P7005
J7005
FILAMENT/HE2
VPAR
HPAR
+15VDC
-15VDC
J8204
P8202
P7019
J7019
RED VERT
RED HORIZ
GREEN VERT
GREEN HORIZ
BLUE VERT
BLUE HORIZ
PTV AUXILLARY BOARD
HV
T4401-A
FOCUS
RED B+ (+143VDC)
+12VDC RUN
HV RESUPPLY
HORIZ DRIVE
HV REGULATOR PCB
T4751-14
P4701
J4701
P4702
J4702
REG. B+
HV REFERENCE
HV SPLITTER SIP
REF IN
TO KINE DRIVER PCB'S
SCREEN
FOCUS/SCREEN ASSY.
DF
IN
FOCUS HV
HV SPLITTER
BLUE HV
GREEN HV
RED HV
DYNAMIC FOCUS
P7006
J7006
P7012
J7012
BLUE VIDEO
GREEN VIDEO
RED VIDEO
+200VDC
P7007
J7007
HORIZ YOKE
VERT YOKE
P7001
J7001
RAW B+
HOT GROUND
J7015
P7015
P5001R
J5001
J5002
P5002R
SCAN LOSS
RED KINE DRIVER PCB
RED CRT
FROM FOCUS/SCREEN ASSY.
J7018
P7018
VERT CONV
HORIZ CONV
J7009
P7009
HORIZ DEFL
VERT DEFL
P5002G
J7014
P7014
P5001G
GREEN KINE DRIVER PCB
GREEN CRT
J7017
P7017
J7010
P7010
P5002B
J7013
P7013
P5001B
BLUE KINE DRIVER PCB
BLUE CRT
J7016
P7016
J7011
P7011
8T14011-01R01-00-KK-169PTVINTD

INTERCONNECT WIRING DIAGRAM
(CTC169BT,BU,BW)


1-O1
1-O2
1-O3
1-O4
EXT. SPEAKER JACK PCB
E22 E43 E70 E82
GROUND
EXT SPKR L
INT SPKR RETURN
EXT SPKR R
IR PREAMP
FRONT PANEL ASSEMBLY
P3401
J3401
J3404
P3404
P3001
J3001
GND
+9VDC
+12VDC
IR
KD3
KD1
KS0
KS1
KS2
KS3
CTC169BT,BU,BW MAIN PCB
+17VDC
GROUND
-17VDC
E32 E36 E33 E35 E34 E37
P1903
J1903
LEFT SPEAKER
RIGHT SPEAKER
P1904
J1904
INT SPKR L
SPKR RETURN
INT SPKR R
ANALOG AUDIO SIP
JS1901 – JS1923
JM1901 – JM1923
CLOCK
ENABLE
DATA
WB AUDIO
SYS RESET
SPKR ON/OFF
DC SENSE
R SPKR
L SPKR
INT SPKR RETURN
AUDIO SRS CTC169BT ONLY
P1702
J1702
SRS MODE 1
SRS MODE 2
SRS IN L
SRS IN R
GND
SRS OUT R
SRS OUT L
JM6401 – JM6418
JS6401 – JS6418
SEL VIDEO
CHROMA
LUMA
VERT RESET
SW VIDEO
H SYNC
-Y
+5VDC
S-LUMA
TV VIDEO
E53 E69 E68
PIX-IN-PIX PCB (CTC169 BT,BW)
J8003
P8003
P6401
J6401
J8002
P8002
P6402
J6402
IF VIDEO
SELECTED VIDEO
J8001
P8001
P6403
J6403
V SYNC
PIP ADAPTER/BLACK STRETCH SIP
J6404
P6404
P8203
J8203
VSYNC
DYNAMIC CONVERGENCE GENERATOR PCB
J8104
P8104
P7005
J7005
FILAMENT/HE2
VPAR
HPAR
+15VDC
-15VDC
J8204
P8202
P7019
J7019
RED VERT
RED HORIZ
GREEN VERT
GREEN HORIZ
BLUE VERT
BLUE HORIZ
HV
T4401-A
FOCUS
E1 E16 E12 E25 E50
REG B+ (+143VDC)
+12VDC RUN
HV RESUPPLY
HORIZ. DRIVE
HV REGULATOR PCB
T4751-14
J4701
P4701
E5
E45
E6 E7 E8 E5 E10 E47 E9
P7012
J7012
BLUE VIDEO
GREEN VIDEO
RED VIDEO
+12VDC
+200VDC
E4401 E4402 E4501 E4502
P7007
J7007
HORIZ YOKE
VERT YOKE
E81 E83
P7001
J7001
RAW B+
HOT GROUND
P4702
J4702
REG. B+
HV REFERENCE
REF IN
HV SPLITTER SIP
HV SPLITTER
A A1 A2 A3 A4
BLUE HV
GREEN HV
RED HV
FOCUS HV
TO KINE DRIVER PCB'S
FOCUS
SCREEN
R G B
IN
GND
DF
DYNAMIC FOCUS
FOCUS/SCREEN ASSY.
P7006
J7006
PTV AUXILLARY BOARD
J7015
P7015
P5001R
J5001
J5002
P5002R
SCAN LOSS
RED KINE DRIVER PCB
RED CRT
FROM FOCUS/ SCREEN ASSY.
J7018
P7018
VERT CONV
HORIZ CONV
J7009
P7009
HORIZ DEFL
VERT DEFL
J7014
P7014
P5001G
P5002G
GREEN KINE DRIVER PCB
GREEN CRT
J7017
P7017
J7010
P7010
J7013
P7013
P5001B
P5002B
BLUE KINE DRIVER PCB
BLUE CRT
J7016
P7016
J7011
P7011
1-O5
1-O6
1-O7
1-O8

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CALLOUTS NEXT TO WIRING PLUGS INDICATE CONNECTIONS TO OTHER SCHEMATICS.

PRODUCT SAFETY NOTE
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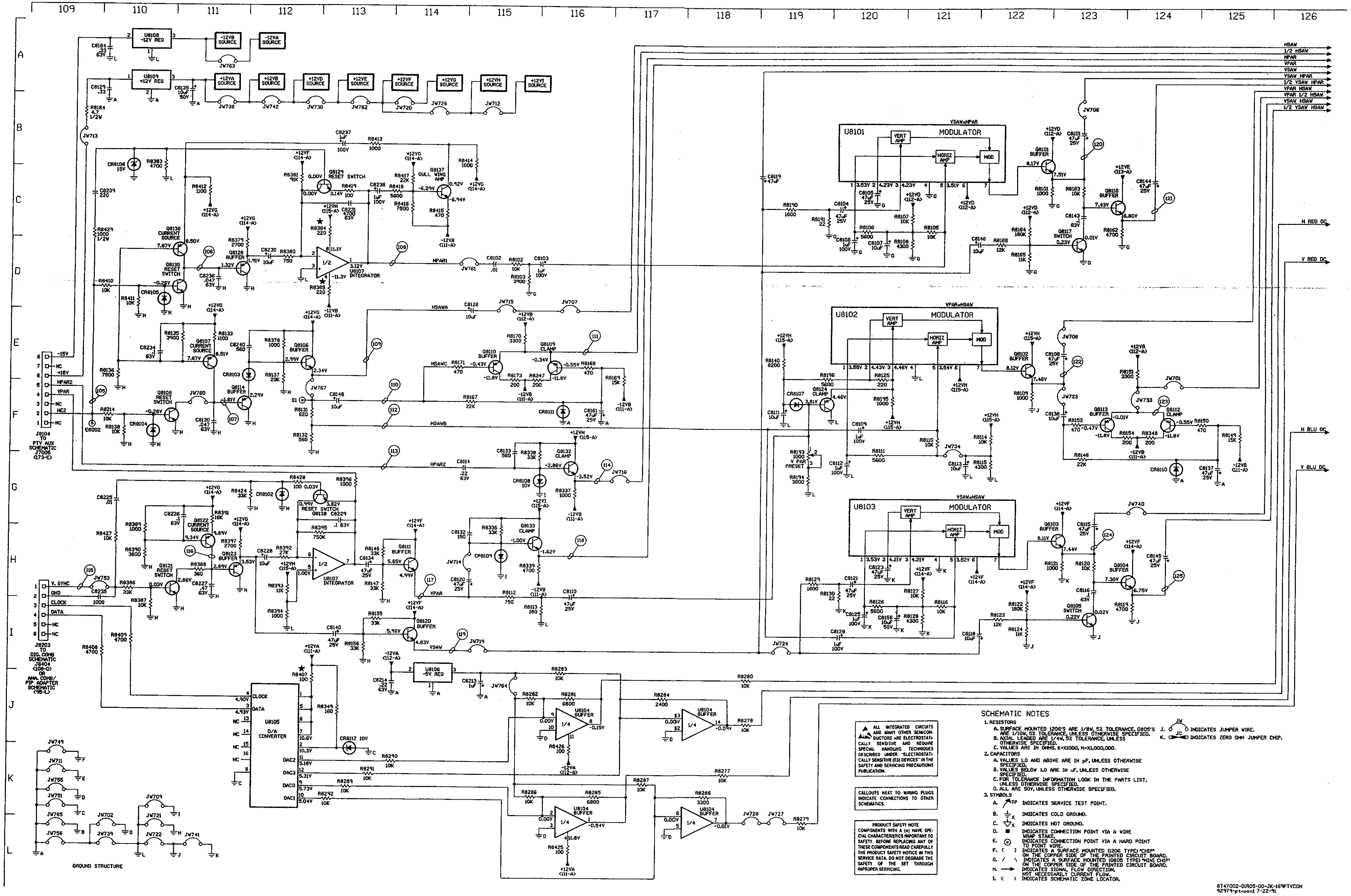
8T14011-02R01-00-JK-169PTVINTA(T)
92979-ptvintat 7-26-91

2-D1 2-D2 2-D3 2-D4

CONVERGENCE SCHEMATIC (1 of 2)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C
D
E
F
G
H
I
J
K
L
U8108 -12V REG
U8109 +12V REG
-12VB SOURCE
-12VA SOURCE
+12VA SOURCE
+12VB SOURCE
+12VD SOURCE
+12VE SOURCE
+12VF SOURCE
+12VG SOURCE
+12VH SOURCE
+12VI SOURCE
Q8136 CURRENT SOURCE
Q8135 RESET SWITCH
Q8128 BUFFER
Q8129 RESET SWITCH
Q8137 GULL WING AMP
U8107 INTEGRATOR
Q8107 CURRENT SOURCE
Q8106 BUFFER
Q8108 RESET SWITCH
Q8114 BUFFER
Q8110 BUFFER
Q8109 CLAMP
Q8132 CLAMP
Q8122 CURRENT SOURCE
Q8121 RESET SWITCH
Q8123 BUFFER
Q8138 RESET SWITCH
Q8111 BUFFER
Q8133 CLAMP
Q8120 BUFFER
U8106 -5V REG
U8105 D/A CONVERTER
U8104 BUFFER
J8104 TO PTV AUX SCHEMATIC J7006 (173-E)
J8203 TO DIG. COMB SCHEMATIC J8404 (108-D) OR ANA. COMB/PIP ADAPTER SCHEMATIC (95-L)
V. SYNC
GND
CLOCK
DATA
HPAR2
VPAR
HE2
GROUND STRUCTURE
U8101 MODULATOR VSAW+HPAR
U8102 MODULATOR VPAR+HSAW
U8103 MODULATOR VSAW+HSAW
VERT AMP
HORIZ AMP
MOD
Q8101 BUFFER
Q8116 BUFFER
Q8117 SWITCH
Q8102 BUFFER
Q8124 CLAMP
Q8113 BUFFER
Q8112 CLAMP
Q8103 BUFFER
Q8104 BUFFER
Q8105 SWITCH
V PAR PRESET
HSAW
1/2 HSAW
HPAR
VPAR
VSAW
VSAW HPAR
1/2 VSAW HPAR
VPAR HSAW
VPAR 1/2 HSAW
VSAW HSAW
1/2 VSAW HSAW
H RED DC
V RED DC
H BLU DC
V BLU DC

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SCHEMATIC NOTES

1. RESISTORS
   - A. SURFACE MOUNTED 1206'S ARE 1/8W, 5% TOLERANCE, 0805'S ARE 1/10W, 5% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
   - B. AXIAL LEADED ARE 1/4W, 5% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
   - C. VALUES ARE IN OHMS. K=X1000, M=X1,000,000.
2. CAPACITORS
   - A. VALUES 1.0 AND ABOVE ARE IN pF, UNLESS OTHERWISE SPECIFIED.
   - B. VALUES BELOW 1.0 ARE IN uF, UNLESS OTHERWISE SPECIFIED.
   - C. FOR TOLERANCE INFORMATION LOOK IN THE PARTS LIST, UNLESS OTHERWISE SPECIFIED.
   - D. ALL ARE 50V, UNLESS OTHERWISE SPECIFIED.
3. SYMBOLS
   - A. TP INDICATES SERVICE TEST POINT.
   - B. X INDICATES COLD GROUND.
   - C. X INDICATES HOT GROUND.
   - D. ■ INDICATES CONNECTION POINT VIA A WIRE WRAP STAKE.
   - E. ⊙ INDICATES CONNECTION POINT VIA A HARD POINT TO POINT WIRE.
   - F. [ ] INDICATES A SURFACE MOUNTED (1206 TYPE) "CHIP" ON THE COPPER SIDE OF THE PRINTED CIRCUIT BOARD.
   - G. / \ INDICATES A SURFACE MOUNTED (0805 TYPE) "MINI CHIP" ON THE COPPER SIDE OF THE PRINTED CIRCUIT BOARD.
   - H. → INDICATES SIGNAL FLOW DIRECTION. NOT NECESSARILY CURRENT FLOW.
   - I. < > INDICATES SCHEMATIC ZONE LOCATOR.
   - J. JW INDICATES JUMPER WIRE.
   - K. JC INDICATES ZERO OHM JUMPER CHIP.

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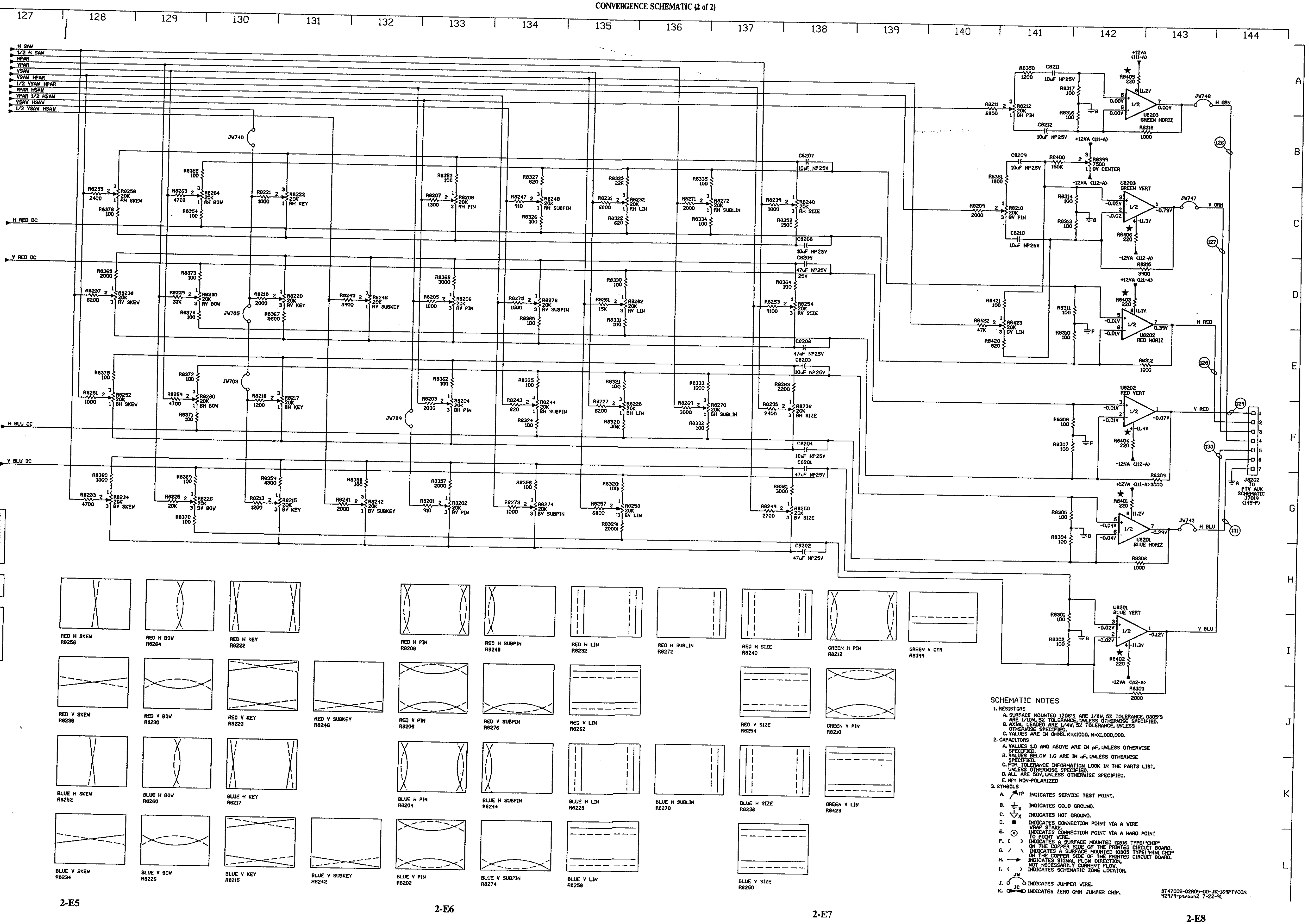
2-D5 2-D6 2-D7 2-D8

CONVERGENCE SCHEMATIC (2 of 2)


2-E1
2-E2
2-E3
2-E4
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
A
B
C
D
E
F
G
H
I
J
K
L
H SAW
1/2 H SAW
HPAR
VPAR
VSAW
VSAW HPAR
1/2 VSAW HPAR
VPAR HSAW
VPAR 1/2 HSAW
VSAW HSAW
1/2 VSAW HSAW
H RED DC
V RED DC
H BLU DC
V BLU DC
JV740
JV705
JV703
JV729
R8256 20K RH SKEW
R8264 20K RH BOW
R8222 20K RH KEY
R8208 20K RH PIN
R8248 20K RH SUBPIN
R8232 20K RH LIN
R8272 20K RH SUBLIN
R8240 20K RH SIZE
R8238 20K RV SKEW
R8230 20K RV BOW
R8220 20K RV KEY
R8246 20K RV SUBKEY
R8206 20K RV PIN
R8276 20K RV SUBPIN
R8262 20K RV LIN
R8254 20K RV SIZE
R8252 20K BH SKEW
R8260 20K BH BOW
R8217 20K BH KEY
R8204 20K BH PIN
R8244 20K BH SUBPIN
R8228 20K BH LIN
R8270 20K BH SUBLIN
R8236 20K BH SIZE
R8234 20K BV SKEW
R8226 20K BV BOW
R8215 20K BV KEY
R8242 20K BV SUBKEY
R8202 20K BV PIN
R8274 20K BV SUBPIN
R8258 20K BV LIN
R8250 20K BV SIZE
C8207 10uF NP25V
C8208 10uF NP25V
C8205 47uF NP25V
C8206 47uF NP25V
C8203 10uF NP25V
C8204 10uF NP25V
C8201 47uF NP25V
C8202 47uF NP25V
R8212 20K GH PIN
R8399 7500 GV CENTER
R8210 20K GV PIN
R8423 20K GV LIN
U8203 GREEN HORIZ
U8203 GREEN VERT
U8202 RED HORIZ
U8202 RED VERT
U8201 BLUE HORIZ
U8201 BLUE VERT
+12VA <111-A>
-12VA <112-A>
JV748
JV747
JV743
H GRN
V GRN
H RED
V RED
H BLU
V BLU
126
127
128
129
130
131
J8202 TO PTV AUX SCHEMATIC J7019 <145-F>
RED H SKEW R8256
RED H BOW R8264
RED H KEY R8222
RED H PIN R8208
RED H SUBPIN R8248
RED H LIN R8232
RED H SUBLIN R8272
RED H SIZE R8240
GREEN H PIN R8212
GREEN V CTR R8399
RED V SKEW R8238
RED V BOW R8230
RED V KEY R8220
RED V SUBKEY R8246
RED V PIN R8206
RED V SUBPIN R8276
RED V LIN R8262
RED V SIZE R8254
GREEN V PIN R8210
BLUE H SKEW R8252
BLUE H BOW R8260
BLUE H KEY R8217
BLUE H PIN R8204
BLUE H SUBPIN R8244
BLUE H LIN R8228
BLUE H SUBLIN R8270
BLUE H SIZE R8236
GREEN V LIN R8423
BLUE V SKEW R8234
BLUE V BOW R8226
BLUE V KEY R8215
BLUE V SUBKEY R8242
BLUE V PIN R8202
BLUE V SUBPIN R8274
BLUE V LIN R8258
BLUE V SIZE R8250
2-E5
2-E6
2-E7
2-E8

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CALLOUTS NEXT TO WIRING PLUGS INDICATE CONNECTIONS TO OTHER SCHEMATICS.

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SCHEMATIC NOTES

1. RESISTORS
   - A. SURFACE MOUNTED 1206'S ARE 1/8W, 5% TOLERANCE, 0805'S ARE 1/10W, 5% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
   - B. AXIAL LEADED ARE 1/4W, 5% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
   - C. VALUES ARE IN OHMS. K=X1000, M=X1,000,000.
2. CAPACITORS
   - A. VALUES 1.0 AND ABOVE ARE IN pF, UNLESS OTHERWISE SPECIFIED.
   - B. VALUES BELOW 1.0 ARE IN uF, UNLESS OTHERWISE SPECIFIED.
   - C. FOR TOLERANCE INFORMATION LOOK IN THE PARTS LIST, UNLESS OTHERWISE SPECIFIED.
   - D. ALL ARE 50V, UNLESS OTHERWISE SPECIFIED.
   - E. NP= NON-POLARIZED
3. SYMBOLS
   - A. ↗TP INDICATES SERVICE TEST POINT.
   - B. ⏚X INDICATES COLD GROUND.
   - C. ▽X INDICATES HOT GROUND.
   - D. ■ INDICATES CONNECTION POINT VIA A WIRE WRAP STAKE.
   - E. ⊙ INDICATES CONNECTION POINT VIA A HARD POINT TO POINT WIRE.
   - F. [ ] INDICATES A SURFACE MOUNTED (1206 TYPE) "CHIP" ON THE COPPER SIDE OF THE PRINTED CIRCUIT BOARD.
   - G. / \ INDICATES A SURFACE MOUNTED (0805 TYPE) "MINI CHIP" ON THE COPPER SIDE OF THE PRINTED CIRCUIT BOARD.
   - H. ⟶ INDICATES SIGNAL FLOW DIRECTION, NOT NECESSARILY CURRENT FLOW.
   - I. < > INDICATES SCHEMATIC ZONE LOCATOR.
   - J. JW INDICATES JUMPER WIRE.
   - K. JC INDICATES ZERO OHM JUMPER CHIP.

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SYSTEM CONTROL SCHEMATIC
(Used CTC169BL,BM,BN,HM,HN)

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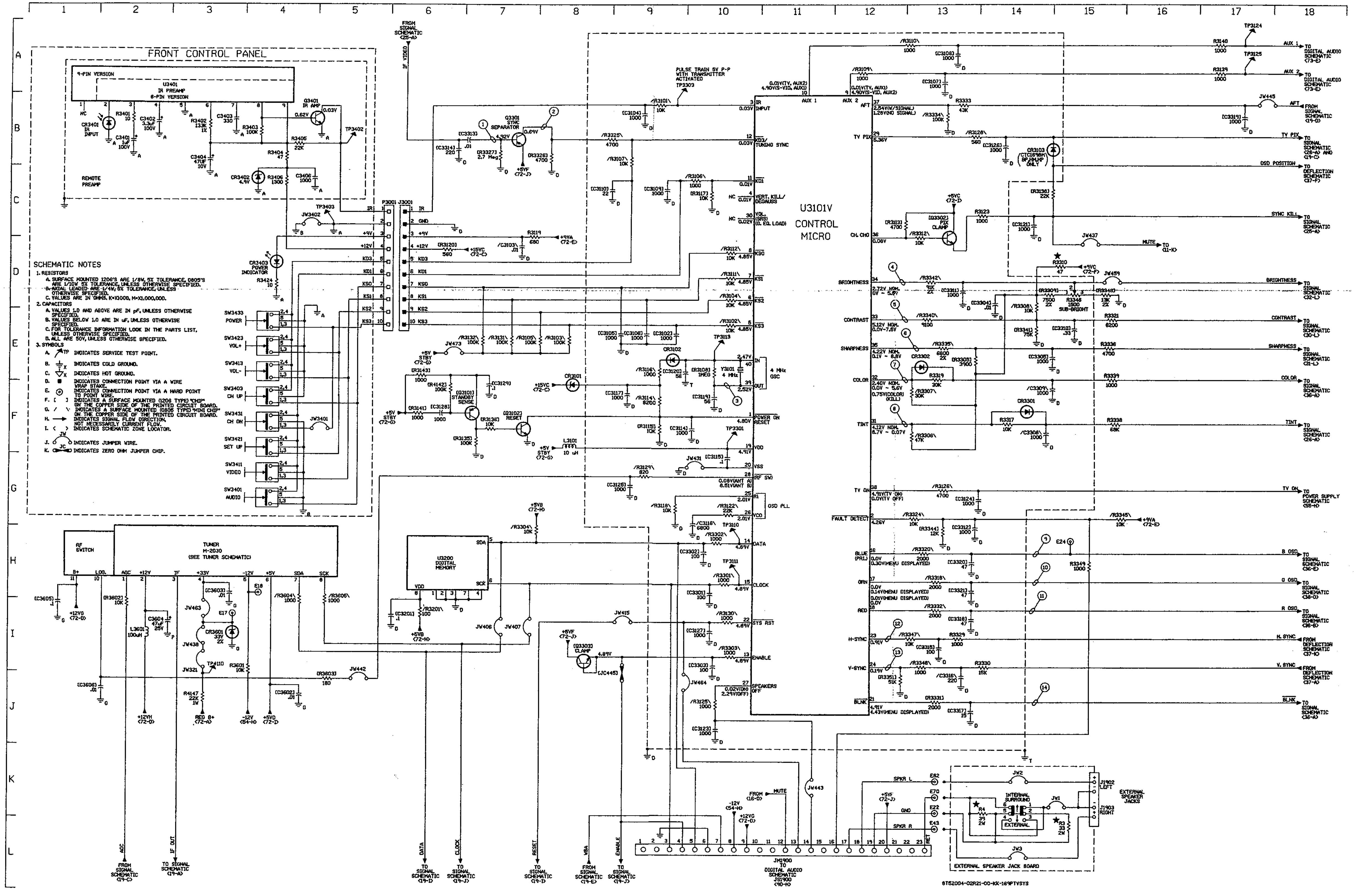
2-F1
2-F2
2-F3
2-F4
2-F5
2-F6
2-F7
2-F8
FRONT CONTROL PANEL
9-PIN VERSION
U3401 IR PREAMP 8-PIN VERSION
REMOTE PREAMP
Q3401 IR AMP
CR3401 IR INPUT
CR3403 POWER INDICATOR
SW3433 POWER
SW3423 VOL+
SW3413 VOL-
SW3403 CH UP
SW3431 CH DN
SW3421 SET UP
SW3411 VIDEO
SW3401 AUDIO
P3001
J3001
FROM SIGNAL SCHEMATIC <25-A>
IF VIDEO
Q3301 SYNC SEPARATOR
PULSE TRAIN 5V P-P WITH TRANSMITTER ACTIVATED TP3303
Q3101 STANDBY SENSE
Q3102 RESET
U3101V CONTROL MICRO
IR INPUT
KD3/ TUNING SYNC
KD1
VERT. KILL/ DEGAUSS
VOL. (SRS) (G. EQ. LOAD)
KS0
KS1
KS2
KS3
4 MHz OSC
POWER ON RESET
VDD
VSS
(RF SW)
OSD PLL
DATA
CLOCK
SYS RST
ENABLE
SPEAKERS OFF
AUX 1
AUX 2
AFT
TV PIX
CH. CHG
BRIGHTNESS
CONTRAST
SHARPNESS
COLOR
TINT
TV ON
FAULT DETECT
BLUE (PRL)
GRN
RED
H-SYNC
V-SYNC
BLNK
Q3302 PIX CLAMP
Q3303 CLAMP
CR3103 (CTC169HM) BF-JH-HF ONLY
SUB-BRIGHT
AUX 1 TO DIGITAL AUDIO SCHEMATIC <73-E>
AUX 2 TO DIGITAL AUDIO SCHEMATIC <73-E>
AFT FROM SIGNAL SCHEMATIC <19-D>
TV PIX TO SIGNAL SCHEMATIC <28-A> AND <19-C>
OSD POSITION TO DEFLECTION SCHEMATIC <37-F>
SYNC KILL TO SIGNAL SCHEMATIC <25-A>
MUTE TO <11-K>
BRIGHTNESS TO SIGNAL SCHEMATIC <32-L>
CONTRAST TO SIGNAL SCHEMATIC <30-L>
SHARPNESS TO SIGNAL SCHEMATIC <31-L>
COLOR TO SIGNAL SCHEMATIC <36-A>
TINT TO SIGNAL SCHEMATIC <26-A>
TV ON TO POWER SUPPLY SCHEMATIC <55-H>
B OSD TO SIGNAL SCHEMATIC <36-E>
G OSD TO SIGNAL SCHEMATIC <38-D>
R OSD TO SIGNAL SCHEMATIC <36-B>
H. SYNC FROM DEFLECTION SCHEMATIC <37-K>
V. SYNC FROM DEFLECTION SCHEMATIC <37-A>
BLNK TO SIGNAL SCHEMATIC <36-A>
RF SWITCH
TUNER H-2030 (SEE TUNER SCHEMATIC)
U3200 DIGITAL MEMORY
ACC FROM SIGNAL SCHEMATIC <19-C>
IF OUT TO SIGNAL SCHEMATIC <19-A>
DATA TO SIGNAL SCHEMATIC <19-D>
CLOCK TO SIGNAL SCHEMATIC <19-J>
RESET TO SIGNAL SCHEMATIC <19-I>
WBA FROM SIGNAL SCHEMATIC <19-E>
ENABLE TO SIGNAL SCHEMATIC <19-J>
JH1900 TO DIGITAL AUDIO SCHEMATIC JS1900 <90-H>
FROM <16-D> MUTE
SPKR L
SPKR R
GND
INTERNAL SURROUND
EXTERNAL
J1902 LEFT
J1903 RIGHT
EXTERNAL SPEAKER JACKS
EXTERNAL SPEAKER JACK BOARD
8T52004-02R21-00-KK-169PTVSYS

SCHEMATIC NOTES

1. RESISTORS
   - A. SURFACE MOUNTED 1206'S ARE 1/8W, 5% TOLERANCE, 0805'S ARE 1/10W 5% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
   - B. AXIAL LEADED ARE 1/4W, 5% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
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   - D. ALL ARE 50V, UNLESS OTHERWISE SPECIFIED.
3. SYMBOLS
   - A. ↗TP INDICATES SERVICE TEST POINT.
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   - C. ▽X INDICATES HOT GROUND.
   - D. ■ INDICATES CONNECTION POINT VIA A WIRE WRAP STAKE.
   - E. ◎ INDICATES CONNECTION POINT VIA A HARD POINT TO POINT WIRE.
   - F. [ ] INDICATES A SURFACE MOUNTED (1206 TYPE) "CHIP" ON THE COPPER SIDE OF THE PRINTED CIRCUIT BOARD.
   - G. / \ INDICATES A SURFACE MOUNTED (0805 TYPE) "MINI CHIP" ON THE COPPER SIDE OF THE PRINTED CIRCUIT BOARD.
   - H. ⟶ INDICATES SIGNAL FLOW DIRECTION, NOT NECESSARILY CURRENT FLOW.
   - I. < > INDICATES SCHEMATIC ZONE LOCATOR.
   - J. JW INDICATES JUMPER WIRE.
   - K. JC INDICATES ZERO OHM JUMPER CHIP.

SIGNAL SCHEMATIC (ANALOG COMB)
(Used CTC169BM,BN,HM,HN)

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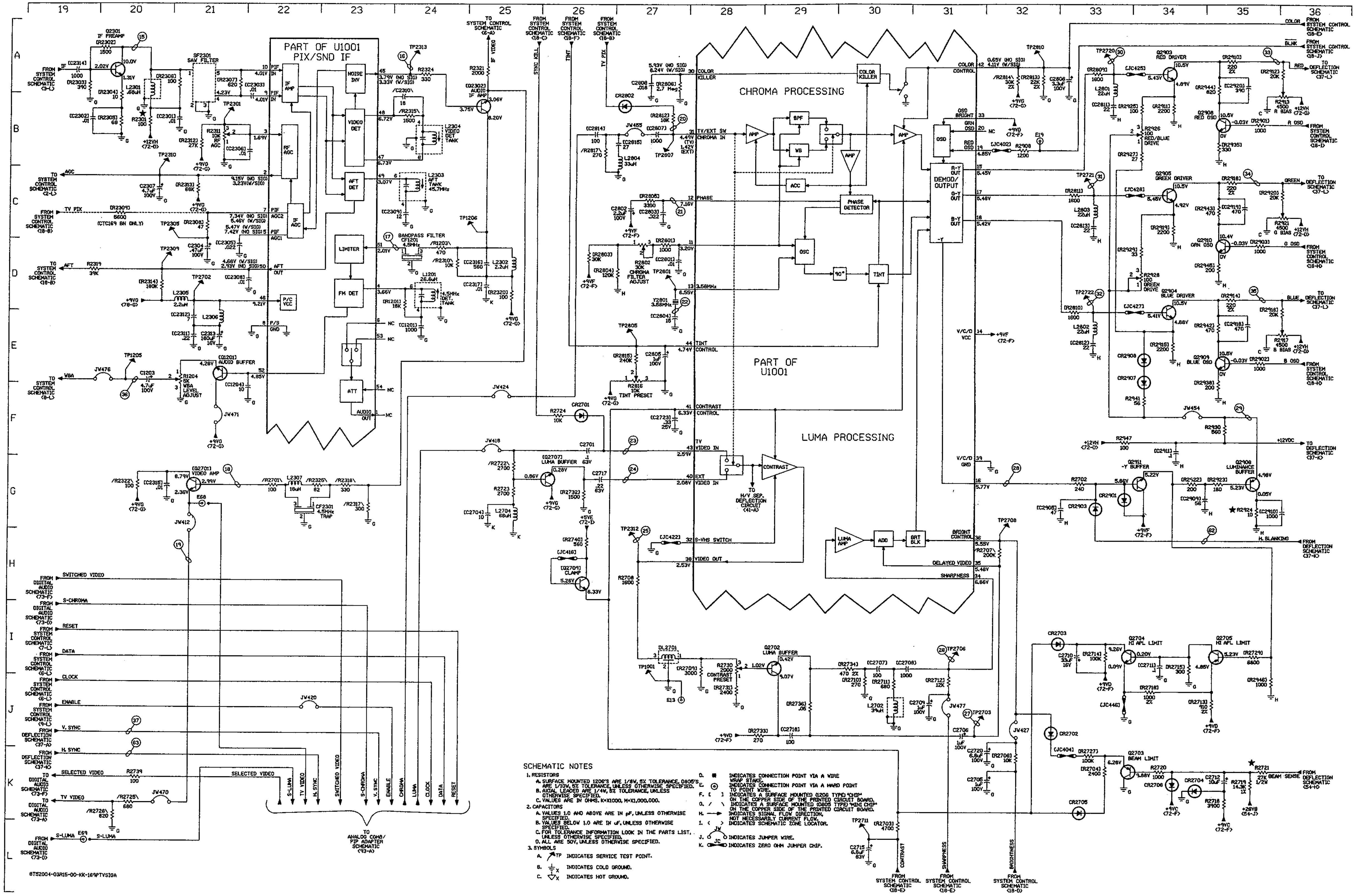
2-G1 2-G2 2-G3 2-G4


PART OF U1001
PIX/SND IF
CHROMA PROCESSING
PART OF U1001
LUMA PROCESSING
DEMOD/ OUTPUT
PHASE DETECTOR
COLOR KILLER
SF2301 SAW FILTER
BANDPASS FILTER
TO ANALOG COMB/ PIP ADAPTER SCHEMATIC
RED DRIVER
GREEN DRIVER
BLUE DRIVER
LUMINANCE BUFFER
BEAM LIMIT
HI APL LIMIT
LUMA BUFFER
VIDEO AMP
AUDIO BUFFER
IF PREAMP
A
B
C
D
E
F
G
H
I
J
K
L
19
20
21
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8T52004-03R15-00-KK-169PTVSIGA

SCHEMATIC NOTES

1. RESISTORS
   - A. SURFACE MOUNTED 1206'S ARE 1/8W, 5% TOLERANCE, 0805'S ARE 1/10W, 5% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
   - B. AXIAL LEADED ARE 1/4W, 5% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
   - C. VALUES ARE IN OHMS. K=X1000, M=X1,000,000.
2. CAPACITORS
   - A. VALUES 1.0 AND ABOVE ARE IN pF, UNLESS OTHERWISE SPECIFIED.
   - B. VALUES BELOW 1.0 ARE IN uF, UNLESS OTHERWISE SPECIFIED.
   - C. FOR TOLERANCE INFORMATION LOOK IN THE PARTS LIST, UNLESS OTHERWISE SPECIFIED.
   - D. ALL ARE 50V, UNLESS OTHERWISE SPECIFIED.
3. SYMBOLS
   - A. TP INDICATES SERVICE TEST POINT.
   - B. ⏚X INDICATES COLD GROUND.
   - C. ▽X INDICATES HOT GROUND.
   - D. ■ INDICATES CONNECTION POINT VIA A WIRE WRAP STAKE.
   - E. ⊙ INDICATES CONNECTION POINT VIA A HARD POINT TO POINT WIRE.
   - F. [ ] INDICATES A SURFACE MOUNTED (1206 TYPE) "CHIP" ON THE COPPER SIDE OF THE PRINTED CIRCUIT BOARD.
   - G. / \ INDICATES A SURFACE MOUNTED (0805 TYPE) "MINI CHIP" ON THE COPPER SIDE OF THE PRINTED CIRCUIT BOARD.
   - H. ——► INDICATES SIGNAL FLOW DIRECTION, NOT NECESSARILY CURRENT FLOW.
   - I. < > INDICATES SCHEMATIC ZONE LOCATOR.
   - J. JW INDICATES JUMPER WIRE.
   - K. JC INDICATES ZERO OHM JUMPER CHIP.

2-G5 2-G6 2-G7 2-G8

SIGNAL SCHEMATIC (DIGITAL COMB)

(Used CTC169BL Only)

ALL INTEGRATED CIRCUITS AND MANY OTHER SEMICONDUCTORS ARE ELECTROSTATICALLY SENSITIVE AND REQUIRE SPECIAL HANDLING TECHNIQUES DESCRIBED UNDER "ELECTROSTATICALLY SENSITIVE (ES) DEVICES" IN THE SAFETY AND SERVICING PRECAUTIONS PUBLICATION.

CALLOUTS NEXT TO WIRING PLUGS INDICATE CONNECTIONS TO OTHER SCHEMATICS.

PRODUCT SAFETY NOTE

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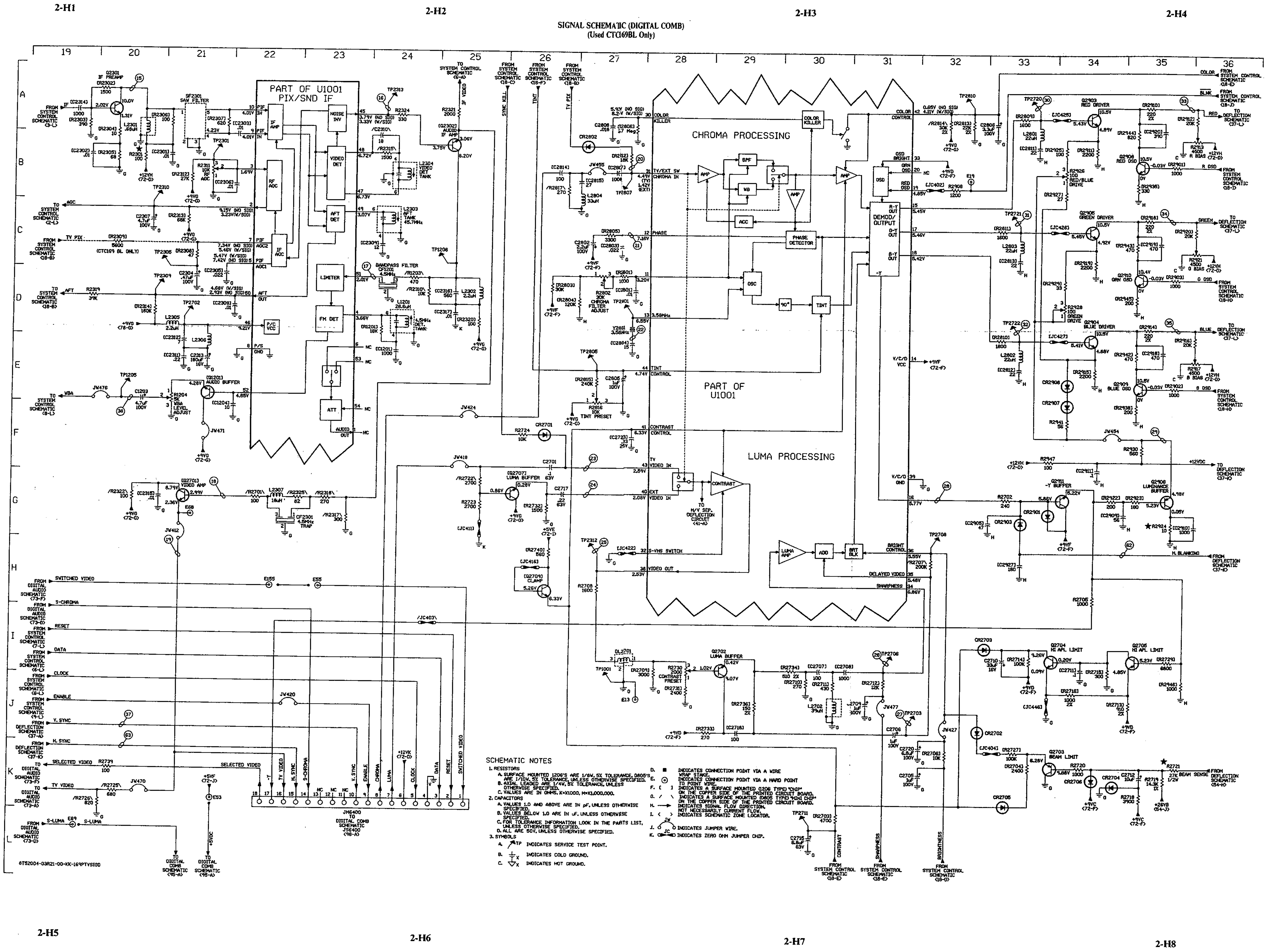
2-H1
2-H2
2-H3
2-H4
2-H5
2-H6
2-H7
2-H8
PART OF U1001 PIX/SND IF
SAW FILTER
IF AMP
RF AGC
IF AGC
NOISE INV
VIDEO DET
AFT DET
LIMITER
FM DET
ATT
P/S VCC
P/S GND
AUDIO OUT
BANDPASS FILTER
AFT TANK
VIDEO DET TANK
CHROMA PROCESSING
COLOR KILLER
BPF
WB
AMP
ACC
PHASE DETECTOR
OSC
90°
TINT
OSD
DEMOD/OUTPUT
PART OF U1001
LUMA PROCESSING
CONTRAST
LUMA AMP
ADD
BRT BLK
AUDIO BUFFER
VIDEO AMP
LUMA BUFFER
CLAMP
RED DRIVER
GREEN DRIVER
BLUE DRIVER
RED OSD
GRN OSD
BLUE OSD
-Y BUFFER
LUMINANCE BUFFER
HI APL LIMIT
BEAM LIMIT
SWITCHED VIDEO
S-CHROMA
RESET
DATA
CLOCK
ENABLE
V. SYNC
H. SYNC
SELECTED VIDEO
TV VIDEO
S-LUMA
CONTRAST
SHARPNESS
BRIGHTNESS
JM6400 TO DIGITAL COMB SCHEMATIC JS6400 (98-A)
6TS2004-03R21-00-KK-169PTVS100

SCHEMATIC NOTES

1. RESISTORS
   - A. SURFACE MOUNTED 1206'S ARE 1/8W, 5% TOLERANCE, 0805'S ARE 1/10W, 5% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
   - B. AXIAL LEADED ARE 1/4W, 5% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
   - C. VALUES ARE IN OHMS, K=X1000, M=X1,000,000.
2. CAPACITORS
   - A. VALUES 1.0 AND ABOVE ARE IN pF, UNLESS OTHERWISE SPECIFIED.
   - B. VALUES BELOW 1.0 ARE IN uF, UNLESS OTHERWISE SPECIFIED.
   - C. FOR TOLERANCE INFORMATION LOOK IN THE PARTS LIST, UNLESS OTHERWISE SPECIFIED.
   - D. ALL ARE 50V, UNLESS OTHERWISE SPECIFIED.
3. SYMBOLS
   - A. TP INDICATES SERVICE TEST POINT.
   - B. ⏚X INDICATES COLD GROUND.
   - C. ▽X INDICATES HOT GROUND.
   - D. ■ INDICATES CONNECTION POINT VIA A WIRE WRAP STAKE.
   - E. ⊙ INDICATES CONNECTION POINT VIA A HARD POINT TO POINT WIRE.
   - F. [ ] INDICATES A SURFACE MOUNTED (1206 TYPE) "CHIP" ON THE COPPER SIDE OF THE PRINTED CIRCUIT BOARD.
   - G. / \ INDICATES A SURFACE MOUNTED (0805 TYPE) "MINI CHIP" ON THE COPPER SIDE OF THE PRINTED CIRCUIT BOARD.
   - H. → INDICATES SIGNAL FLOW DIRECTION, NOT NECESSARILY CURRENT FLOW.
   - I. < > INDICATES SCHEMATIC ZONE LOCATOR.
   - J. JW INDICATES JUMPER WIRE.
   - K. JC INDICATES ZERO OHM JUMPER CHIP.

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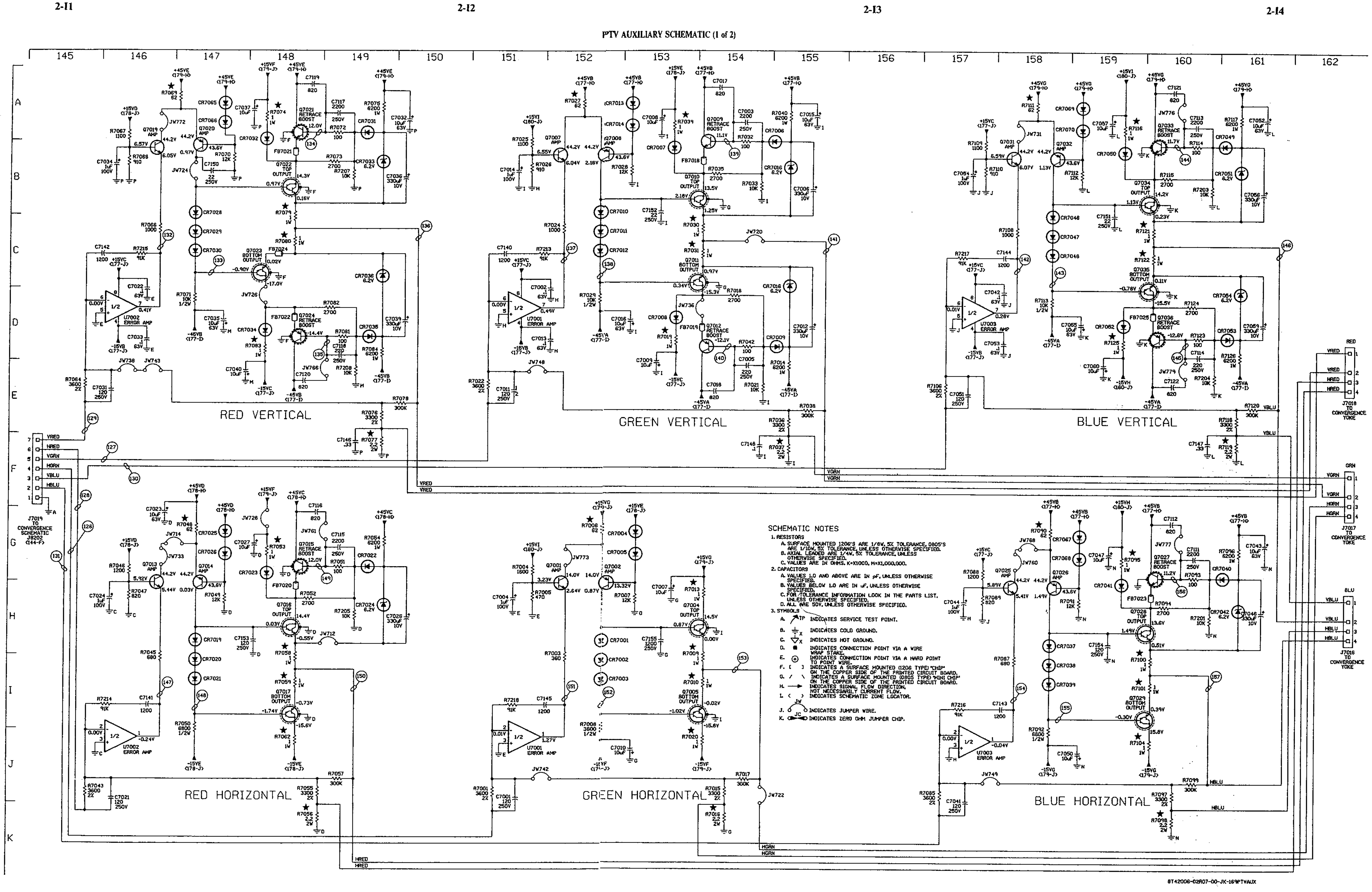
PTV AUXILIARY SCHEMATIC (1 of 2)


2-I1
2-I2
2-I3
2-I4
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
A
B
C
D
E
F
G
H
I
J
K
RED VERTICAL
GREEN VERTICAL
BLUE VERTICAL
RED HORIZONTAL
GREEN HORIZONTAL
BLUE HORIZONTAL
J7019 TO CONVERGENCE SCHEMATIC J8202 <144-F>
J7018 TO CONVERGENCE YOKE
J7017 TO CONVERGENCE YOKE
J7016 TO CONVERGENCE YOKE
RED
GRN
BLU
VRED
HRED
VGRN
HGRN
VBLU
HBLU
U7002 ERROR AMP
U7001 ERROR AMP
U7003 ERROR AMP
RETRACE BOOST
TOP OUTPUT
BOTTOM OUTPUT
8T42006-02R07-00-JK-169PTVAUX

SCHEMATIC NOTES

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   - J. JW INDICATES JUMPER WIRE.
   - K. JC INDICATES ZERO OHM JUMPER CHIP.

2-I5 2-I6 2-I7 2-I8

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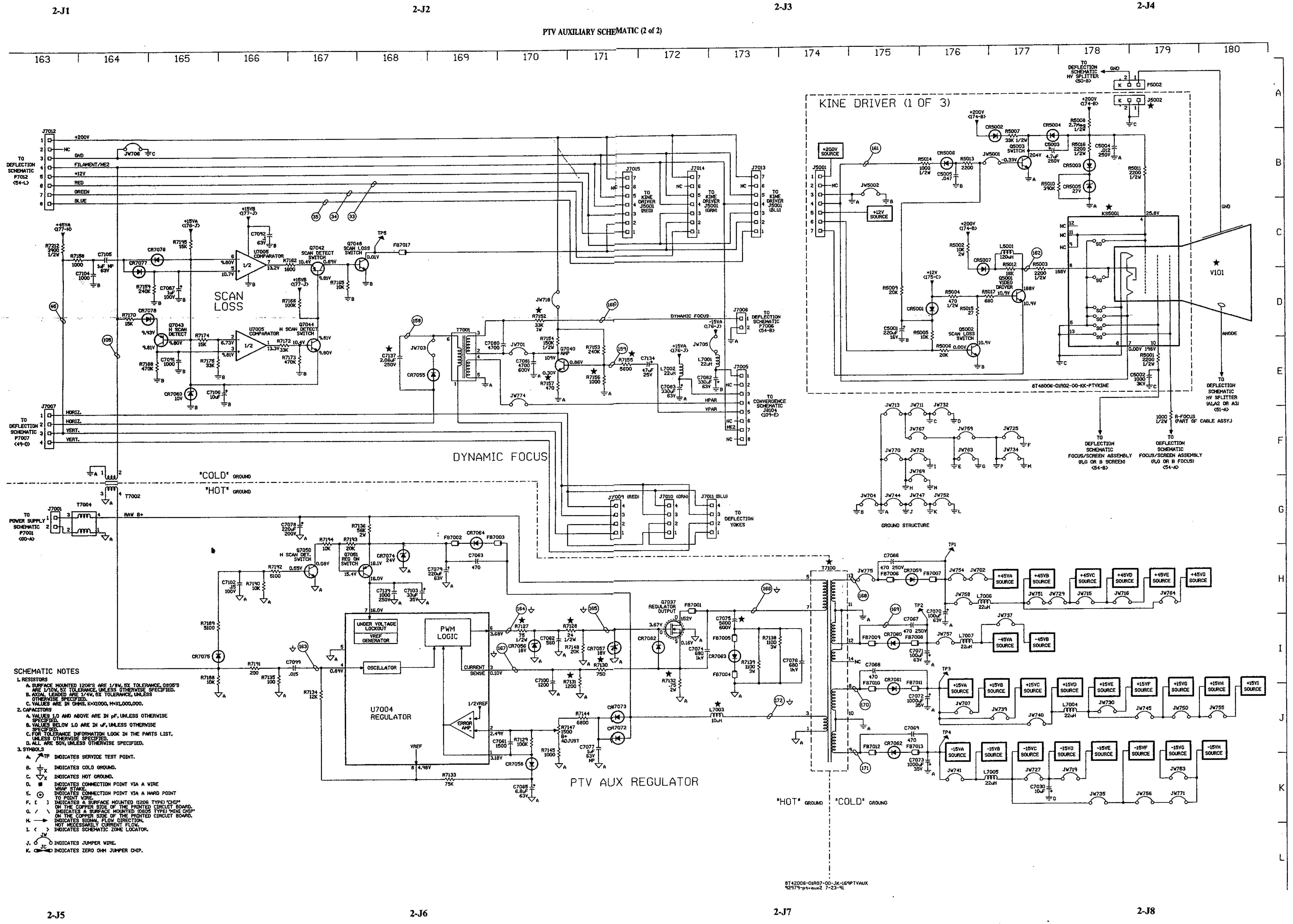
PTV AUXILIARY SCHEMATIC (2 of 2)


2-J1
2-J2
2-J3
2-J4
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
A
B
C
D
E
F
G
H
I
J
K
L
J7012
TO DEFLECTION SCHEMATIC P7012 <54-L>
+200V
NC
GND
FILAMENT/HE2
+12V
RED
GREEN
BLUE
JW706
SCAN LOSS
U7005 COMPARATOR
Q7042 SCAN DETECT SWITCH
Q7046 SCAN LOSS SWITCH
Q7043 H SCAN DETECT
Q7044 H SCAN DETECT SWITCH
TP5
FB7017
J7015 TO KINE DRIVER J5001 (RED)
J7014 TO KINE DRIVER J5001 (GRN)
J7013 TO KINE DRIVER J5001 (BLU)
J7007
TO DEFLECTION SCHEMATIC P7007 <49-D>
HORIZ.
VERT.
T7001
Q7040 AMP
DYNAMIC FOCUS
J7008 TO DEFLECTION SCHEMATIC P7008 <54-B>
J7005 TO CONVERGENCE SCHEMATIC J8104 <109-E>
HPAR
VPAR
HE2
J7009 (RED)
J7010 (GRN)
J7011 (BLU)
TO DEFLECTION YOKES
"COLD" GROUND
"HOT" GROUND
T7002
J7001
T7004
TO POWER SUPPLY SCHEMATIC P7001 <60-A>
RAW B+
Q7050 H SCAN DET. SWITCH
Q7061 REG ON SWITCH
U7004 REGULATOR
UNDER VOLTAGE LOCKOUT
VREF GENERATOR
OSCILLATOR
PWM LOGIC
CURRENT SENSE
ERROR AMP
1/2VREF
VREF
Q7037 REGULATOR OUTPUT
B+ ADJUST
PTV AUX REGULATOR
T7100
KINE DRIVER (1 OF 3)
+200V SOURCE
+12V SOURCE
J5001
JW5002
Q5003 SWITCH
Q5001 VIDEO DRIVER
Q5002 SCAN LOSS SWITCH
KS5001
V101
TO DEFLECTION SCHEMATIC HV SPLITTER <50-B>
P5002
J5002
GND
ANODE
8T48006-01R02-00-KK-PTVKINE
TO DEFLECTION SCHEMATIC FOCUS/SCREEN ASSEMBLY (G,LO OR B SCREEN) <54-B>
R-FOCUS (PART OF CABLE ASSY)
TO DEFLECTION SCHEMATIC FOCUS/SCREEN ASSEMBLY (R,LO OR B FOCUS) <54-A>
TO DEFLECTION SCHEMATIC HV SPLITTER (A1,A2 OR A3) <51-A>
GROUND STRUCTURE
TP1
TP2
TP3
TP4
+45VA SOURCE
+45VB SOURCE
+45VC SOURCE
+45VD SOURCE
+45VE SOURCE
+45VG SOURCE
-45VA SOURCE
-45VB SOURCE
+15VA SOURCE
+15VB SOURCE
+15VC SOURCE
+15VD SOURCE
+15VE SOURCE
+15VF SOURCE
+15VG SOURCE
+15VH SOURCE
+15VI SOURCE
-15VA SOURCE
-15VB SOURCE
-15VC SOURCE
-15VD SOURCE
-15VE SOURCE
-15VF SOURCE
-15VG SOURCE
-15VH SOURCE
8T42006-01R07-00-JK-169PTVAUX
92979-pt-aux2 7-23-91
2-J5
2-J6
2-J7
2-J8

SCHEMATIC NOTES

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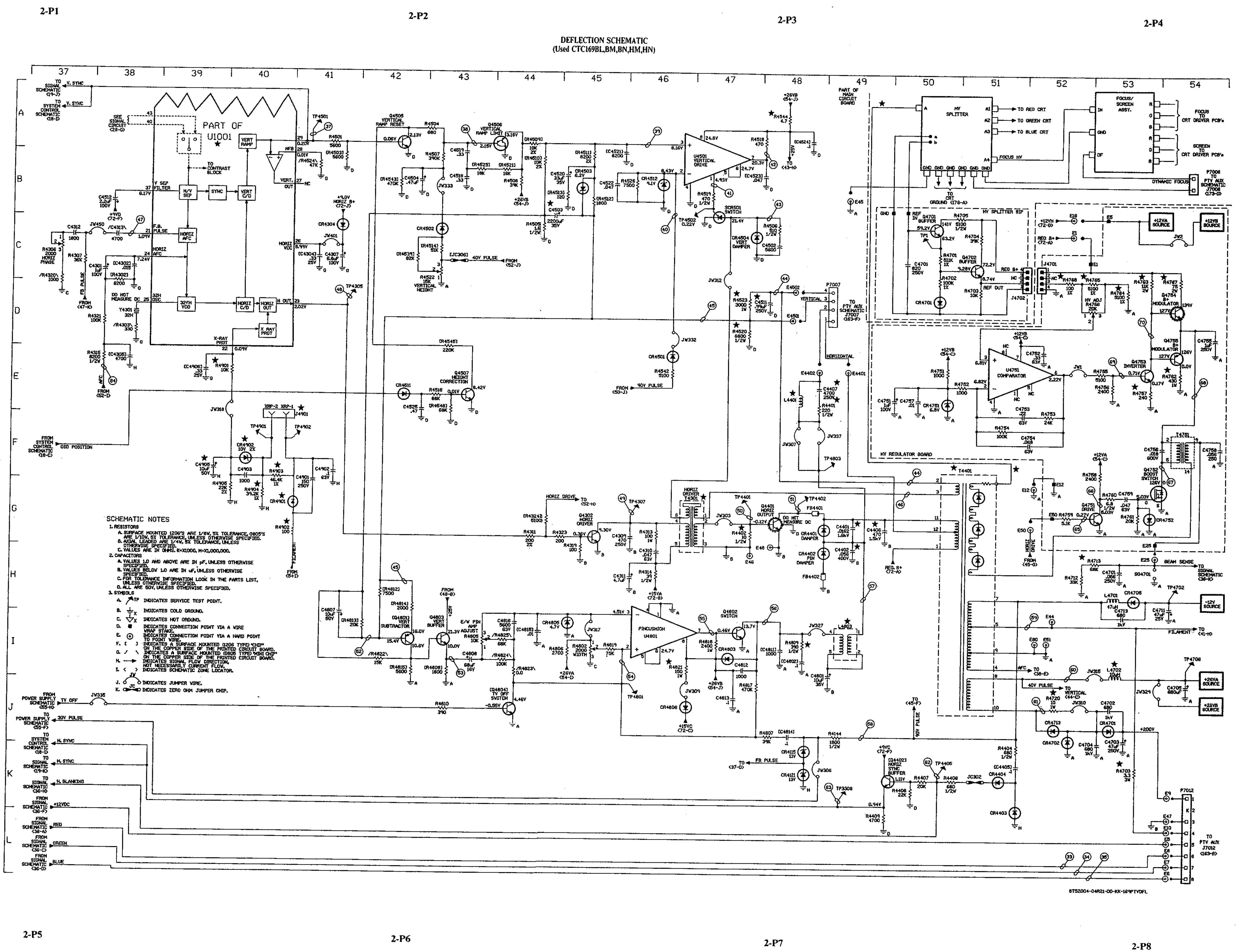
DEFLECTION SCHEMATIC
(Used CTC169BL,BM,BN,HM,HN)


2-P1
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2-P8
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54
A
B
C
D
E
F
G
H
I
J
K
L
PART OF U1001
V SEP FILTER
H/V SEP
SYNC
VERT C/D
VERT RAMP
HORIZ AFC
32FH VCO
HORIZ C/D
HORIZ OUT
X RAY PROT
TO CONTRAST BLOCK
SEE SIGNAL CIRCUIT (28-G)
TO SIGNAL SCHEMATIC (19-J) V. SYNC
TO SYSTEM CONTROL SCHEMATIC (18-D) V. SYNC
FB PULSE
AFC
DO NOT MEASURE DC
FROM SYSTEM CONTROL SCHEMATIC (18-D) OSD POSITION
Q4505 VERTICAL RAMP RESET
Q4506 VERTICAL RAMP LIMIT
Q4507 HEIGHT CORRECTION
R4522 10K VERTICAL HEIGHT
40V PULSE
U4501 VERTICAL DRIVE
SCR501 SWITCH
CR4504 VERT DAMPER
P7007 TO PTV AUX SCHEMATIC J7007 (63-F)
VERTICAL
HORIZONTAL
PART OF MAIN CIRCUIT BOARD
HV SPLITTER
TO RED CRT
TO GREEN CRT
TO BLUE CRT
FOCUS HV
FOCUS/SCREEN ASSY.
FOCUS TO CRT DRIVER PCB's
SCREEN TO CRT DRIVER PCB's
DYNAMIC FOCUS
P7006 TO PTV AUX SCHEMATIC J7006 (73-D)
HV SPLITTER BIP
Q4701 BUFFER
Q4702 BUFFER
REF OUT
HV ADJ
+12VA SOURCE
+12VB SOURCE
U4751 COMPARATOR
Q4753 INVERTER
Q4754 B+ MODULATOR
Q4755 B+ MODULATOR
Q4752 BOOST SWITCH
Q4751 DRIVE
T4751
HV REGULATOR BOARD
T4401
BEAM SENSE
TO SIGNAL SCHEMATIC (36-H)
-12V SOURCE
+26VA SOURCE
+26VB SOURCE
FILAMENT
40V PULSE
TO VERTICAL (44-D)
+200V
P7012
TO PTV AUX J7012 (63-E)
HORIZ DRIVE
Q4302 HORIZ DRIVER
T4301 HORIZ DRIVER
Q4401 HORIZ OUTPUT
DO NOT MEASURE DC
CR4401 DAMPER
CR4402 PIN DAMPER
U4801 PINCUSHION
Q4802 SWITCH
Q4801 VERT SUBTRACTOR
Q4803 VERT BUFFER
E/W PIN AMP ADJUST
WIDTH
L4802
Q4804 TV OFF SWITCH
FROM POWER SUPPLY SCHEMATIC (55-H) TV OFF
TO POWER SUPPLY SCHEMATIC (55-F) 30V PULSE
TO SYSTEM CONTROL SCHEMATIC (18-D) H. SYNC
TO SIGNAL SCHEMATIC (19-H) H. SYNC
TO SIGNAL SCHEMATIC (36-H) H. BLANKING
FROM SIGNAL SCHEMATIC (36-F) +12VDC
FROM SIGNAL SCHEMATIC (36-A) RED
FROM SIGNAL SCHEMATIC (36-C) GREEN
FROM SIGNAL SCHEMATIC (36-D) BLUE
Q4402 HORIZ SYNC BUFFER
FB PULSE
90V PULSE
XRP-2 XRP-1
FILAMENT
8TS2004-04R21-00-KK-16*PTVDFL

SCHEMATIC NOTES

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   - J. JW INDICATES JUMPER WIRE.
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POWER SUPPLY SCHEMATIC
(Used CTC169BL,BM,BN,HM,HN)

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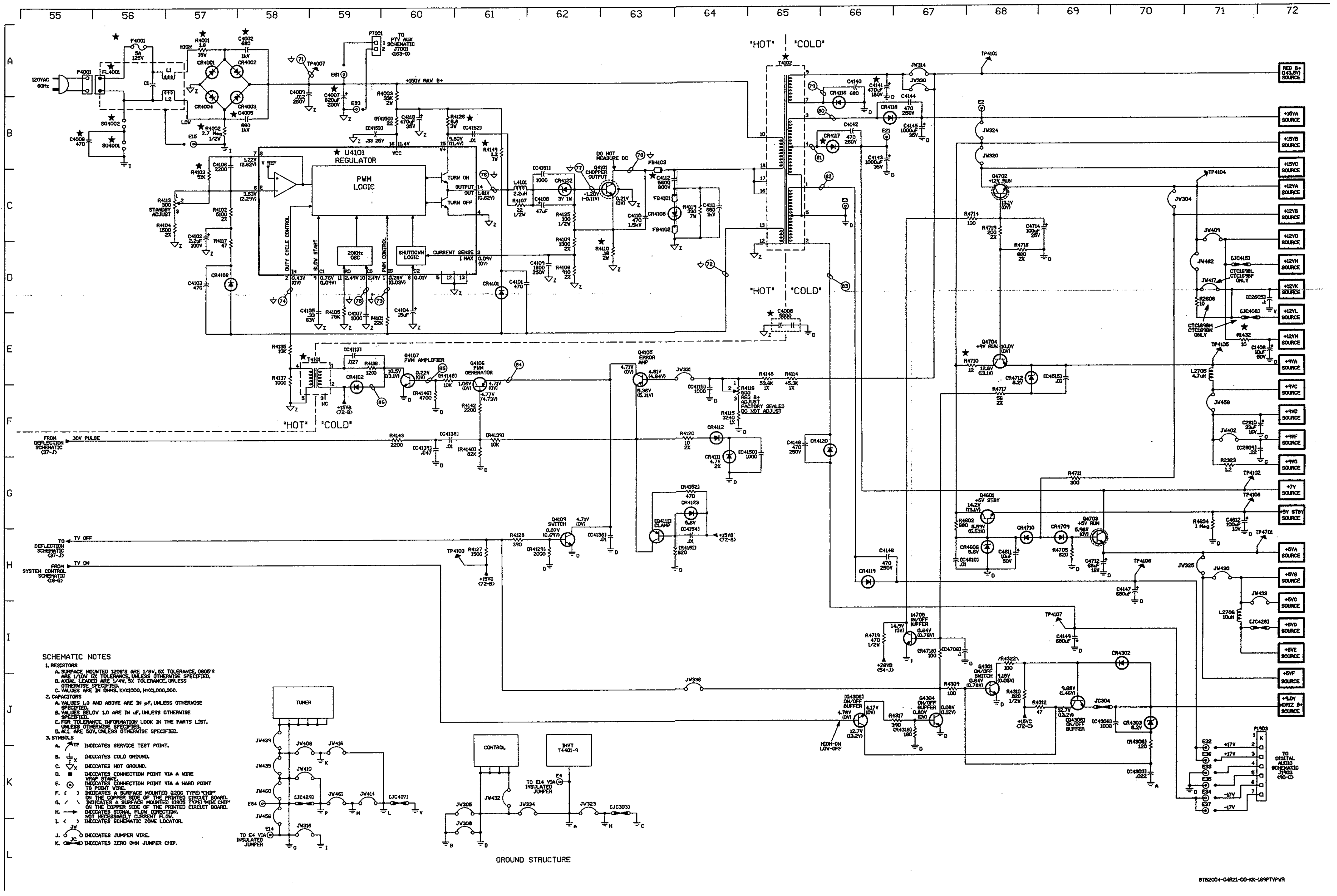
2-Q1
2-Q2
2-Q3
2-Q4
2-Q5
2-Q6
2-Q7
2-Q8
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71
72
A
B
C
D
E
F
G
H
I
J
K
L
120VAC 60Hz
P4001
FL4001
F4001 5A 125V
L1
L2
C1
SG4002
SG4001
C4008 470
HIGH
LOW
R4001 1.8 15W
CR4001
CR4002
CR4003
CR4004
C4002 680 1KV
C4005 680 1KV
R4002 2.7 Meg 1/2W
E15
TP4007
E81
E83
C4009 .012 250V
C4007 820uF 200V
P7001
TO PTV AUX SCHEMATIC J7001 <63-O>
+150V RAW B+
R4003 33K 2W
U4101 REGULATOR
PWM LOGIC
V REF
20KHz OSC
SHUTDOWN LOGIC
CURRENT SENSE 1 MAX
DUTY CYCLE CONTROL
SLOW START
PWM CONTROL
TURN ON
TURN OFF
OUTPUT
VCC
R4113 300 STANDBY ADJUST
R4103 51K
R4104 1500
R4102 6100
C4106 2200
C4102 2.2uF 100V
R4117 47
C4103 470
CR4106
C4105 .33 63V
R4105 75K
C4107 1000
R4101 22K
C4104 15uF
R4126 6.8 3W
R4149 1.2 1W
CR4101
C4101 470
L4101 2.2uH
R4107 22 1/2W
C4108 47uF
CR4122 3V 1W
R4125 100 1/2W
R4109 1300
R4108 910
C4109 1800 250V
R4110 .18 2W
Q4101 CHOPPER OUTPUT
DO NOT MEASURE DC
FB4103
FB4101
FB4102
C4112 5600 800V
R4119 390 7W
C4111 680 1KV
C4110 470 1.5KV
CR4108
T4102
"HOT"
"COLD"
C4008 5000
T4101
R4135 10K
R4137 1000
CR4102
R4136 1200
Q4107 PWM AMPLIFIER
Q4106 PWM GENERATOR
CR4146 4700
R4142 2200
Q4105 ERROR AMP
R4148 53.6K 1%
R4114 45.3K 1%
R4118 500 REG B+ ADJUST FACTORY SEALED DO NOT ADJUST
R4115 3240 1%
FROM DEFLECTION SCHEMATIC <37-J>
30V PULSE
R4143 2200
C4139 .047
CR4140 82K
CR4139 10K
R4120 10
CR4112
CR4111 4.7V
C4150 1000
C4146 470 250V
CR4120
TO DEFLECTION SCHEMATIC <37-J>
TV OFF
FROM SYSTEM CONTROL SCHEMATIC <18-O>
TV ON
TP4103
R4127 1500
R4128 390
CR4129 2000
Q4109 SWITCH
Q4111 CLAMP
CR4123 5.6V
CR4151 820
+15VB <72-B>
CR4119
C4148 470 250V
JW336
CR4116 680
C4140
C4141 470uF 160V
CR4118 470 250V
C4144
C4145 1000uF 35V
CR4117 470 250V
C4142
C4143 1000uF 35V
E21
E3
E2
JW354
JW330
JW324
JW320
TP4101
Q4702 +12V RUN
R4714 100
R4715 200
C4714 100uF 25V
R4716 680
JW304
TP4104
Q4704 +9V RUN
R4710 12
CR4712 8.2V
R4717 56
R4711 300
Q4601 +5V STBY
R4602 680
CR4606 5.6V
C4610 .01
CR4710
CR4709
C4611 10uF 50V
R4709 820
Q4703 +5V RUN
C4712 68uF 16V
C4147 680uF
TP4108
TP4107
C4149 680uF
CR4302
Q4705 ON/OFF BUFFER
R4719 470 1/2W
CR4718 100
C4706
+26VB <54-J>
Q4301 ON/OFF SWITCH
R4322 100
R4309 100
R4310 820 1/2W
R4312 47
+15VC <72-C>
Q4306 ON/OFF BUFFER
Q4305 ON/OFF BUFFER
Q4304 ON/OFF BUFFER
R4317 390
CR4318 180
JC304
C4306 1000
CR4303 8.2V
CR4306 120
C4303 .022
HIGH-ON LOW-OFF
JW409
JW462
JW417
JC4151
CTC169BL CTC169BF ONLY
R2606 10
CTC169BM CTC169BN ONLY
C2605 .1
JC4061
R1432 10
C1406 10uF 50V
TP4106
L2705 4.7uH
JW458
JW402
C2810 33uF 16V
C2809 .1
R2323 1.2
TP4102
R4604 1 Meg
C4612 100uF 10V
TP4701
TP4106
JW325
JW430
JW433
L2706 10uH
JC4283
E32
E36
E33
E35
E34
E37
+17V
-17V
P1903
TO DIGITAL AUDIO SCHEMATIC J1903 <90-O>
RED B+ (143.5V) SOURCE
+15VA SOURCE
+15VB SOURCE
+15VC SOURCE
+12VA SOURCE
+12VB SOURCE
+12VD SOURCE
+12VH SOURCE
+12VK SOURCE
+12VL SOURCE
+12VM SOURCE
+9VA SOURCE
+9VC SOURCE
+9VD SOURCE
+9VF SOURCE
+9VG SOURCE
+7V SOURCE
+5V STBY SOURCE
+5VA SOURCE
+5VB SOURCE
+5VC SOURCE
+5VD SOURCE
+5VE SOURCE
+5VF SOURCE
+9.0V HORIZ B+ SOURCE
TUNER
JW439
JW435
JW460
E84
JW456
E14
TO E4 VIA INSULATED JUMPER
JW408
JW416
JW410
JW461
JW414
JC4291
JC4071
JW316
CONTROL
SHYT T4401-9
TO E14 VIA INSULATED JUMPER
E4
JW305
JW308
JW432
JW334
JW323
JC3031
GROUND STRUCTURE
8TS2004-04R21-00-KK-169PTVPWR

SCHEMATIC NOTES

1. RESISTORS
   A. SURFACE MOUNTED 1206'S ARE 1/8W, 5% TOLERANCE, 0805'S ARE 1/10W 5% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
   B. AXIAL LEADED ARE 1/4W, 5% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
   C. VALUES ARE IN OHMS. K=X1000, M=X1,000,000.
2. CAPACITORS
   A. VALUES 1.0 AND ABOVE ARE IN pF, UNLESS OTHERWISE SPECIFIED.
   B. VALUES BELOW 1.0 ARE IN uF, UNLESS OTHERWISE SPECIFIED.
   C. FOR TOLERANCE INFORMATION LOOK IN THE PARTS LIST, UNLESS OTHERWISE SPECIFIED.
   D. ALL ARE 50V, UNLESS OTHERWISE SPECIFIED.
3. SYMBOLS
   A. ↗TP INDICATES SERVICE TEST POINT.
   B. ⏚X INDICATES COLD GROUND.
   C. ▽X INDICATES HOT GROUND.
   D. ■ INDICATES CONNECTION POINT VIA A WIRE WRAP STAKE.
   E. ◎ INDICATES CONNECTION POINT VIA A HARD POINT TO POINT WIRE.
   F. [ ] INDICATES A SURFACE MOUNTED (1206 TYPE) "CHIP" ON THE COPPER SIDE OF THE PRINTED CIRCUIT BOARD.
   G. / \ INDICATES A SURFACE MOUNTED (0805 TYPE) "MINI CHIP" ON THE COPPER SIDE OF THE PRINTED CIRCUIT BOARD.
   H. ⟶ INDICATES SIGNAL FLOW DIRECTION. NOT NECESSARILY CURRENT FLOW.
   I. < > INDICATES SCHEMATIC ZONE LOCATOR.
   J. JW INDICATES JUMPER WIRE.
   K. JC INDICATES ZERO OHM JUMPER CHIP.

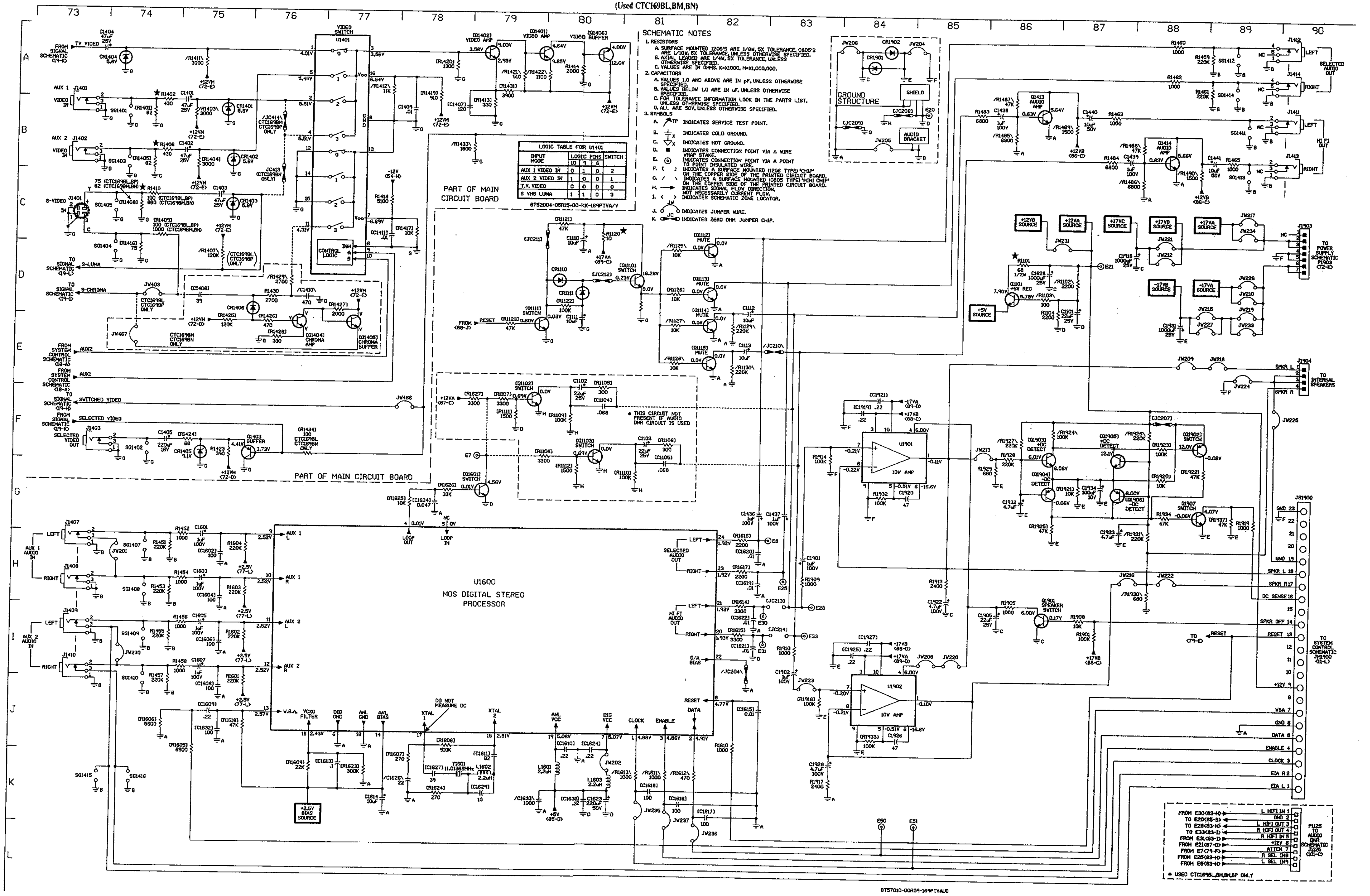
ALL INTEGRATED CIRCUITS AND MANY OTHER SEMICONDUCTORS ARE ELECTROSTATICALLY SENSITIVE AND REQUIRE SPECIAL HANDLING TECHNIQUES DESCRIBED UNDER "ELECTROSTATICALLY SENSITIVE (ES) DEVICES" IN THE SAFETY AND SERVICING PRECAUTIONS PUBLICATION.

CALLOUTS NEXT TO WIRING PLUGS INDICATE CONNECTIONS TO OTHER SCHEMATICS.

PRODUCT SAFETY NOTE

COMPONENTS WITH A (★) HAVE SPECIAL CHARACTERISTICS IMPORTANT TO SAFETY. BEFORE REPLACING ANY OF THESE COMPONENTS READ CAREFULLY THE PRODUCT SAFETY NOTICE IN THIS SERVICE DATA. DO NOT DEGRADE THE SAFETY OF THE SET THROUGH IMPROPER SERVICING.

AUDIO-DIGITAL STEREO SCHEMATIC
(Used CTC169BL,BM,BN)


2-R1
2-R2
2-R3
2-R4
2-R5
2-R6
2-R7
2-R8
U1401 VIDEO SWITCH
CONTROL LOGIC
U1600 MOS DIGITAL STEREO PROCESSOR
U1901 10W AMP
U1902 10W AMP
PART OF MAIN CIRCUIT BOARD
GROUND STRUCTURE
SHIELD
AUDIO BRACKET
AUX 1 VIDEO IN
AUX 2 VIDEO IN
S-VIDEO
AUX 1 AUDIO IN
AUX 2 AUDIO IN
SELECTED VIDEO OUT
SELECTED AUDIO OUT
HI FI OUT
TO INTERNAL SPEAKERS
TO POWER SUPPLY SCHEMATIC
TO SYSTEM CONTROL SCHEMATIC
DO NOT MEASURE DC
THIS CIRCUIT NOT PRESENT IF AUDIO DNR CIRCUIT IS USED
USED CTC169BL,BM,BP ONLY
8T57010-00R04-169PTVAUD

SCHEMATIC NOTES

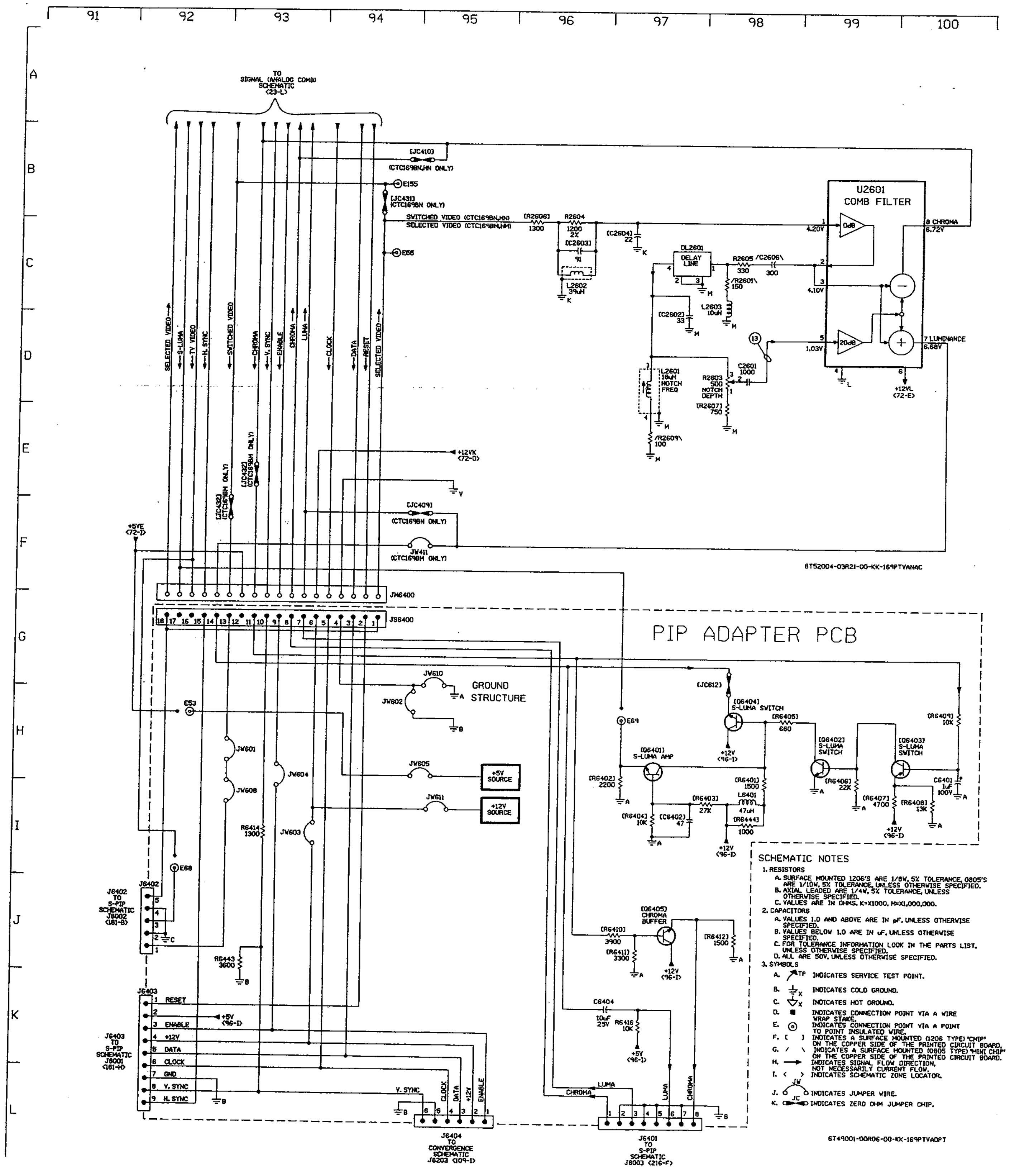
1. RESISTORS
   - A. SURFACE MOUNTED 1206'S ARE 1/8W, 5% TOLERANCE, 0805'S ARE 1/10W, 5% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
   - B. AXIAL LEADED ARE 1/4W, 5% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
   - C. VALUES ARE IN OHMS. K=X1000, M=X1,000,000.
2. CAPACITORS
   - A. VALUES 1.0 AND ABOVE ARE IN pF, UNLESS OTHERWISE SPECIFIED.
   - B. VALUES BELOW 1.0 ARE IN uF, UNLESS OTHERWISE SPECIFIED.
   - C. FOR TOLERANCE INFORMATION LOOK IN THE PARTS LIST, UNLESS OTHERWISE SPECIFIED.
   - D. ALL ARE 50V, UNLESS OTHERWISE SPECIFIED.
3. SYMBOLS
   - A. TP INDICATES SERVICE TEST POINT.
   - B. ⏚X INDICATES COLD GROUND.
   - C. ▽X INDICATES HOT GROUND.
   - D. ■ INDICATES CONNECTION POINT VIA A WIRE WRAP STAKE.
   - E. ⊙ INDICATES CONNECTION POINT VIA A POINT TO POINT INSULATED WIRE.
   - F. [ ] INDICATES A SURFACE MOUNTED (1206 TYPE) "CHIP" ON THE COPPER SIDE OF THE PRINTED CIRCUIT BOARD.
   - G. / \ INDICATES A SURFACE MOUNTED (0805 TYPE) "MINI CHIP" ON THE COPPER SIDE OF THE PRINTED CIRCUIT BOARD.
   - H. ⟶ INDICATES SIGNAL FLOW DIRECTION, NOT NECESSARILY CURRENT FLOW.
   - I. < > INDICATES SCHEMATIC ZONE LOCATOR.
   - J. JW INDICATES JUMPER WIRE.
   - K. JC INDICATES ZERO OHM JUMPER CHIP.

LOGIC TABLE FOR U1401

INPUT MODE	LOGIC PINS			SWITCH
	10	9	6	
AUX 1 VIDEO IN	0	1	0	2
AUX 2 VIDEO IN	1	0	0	1
T.V. VIDEO	0	0	0	0
S VHS LUMA	1	1	0	3

8T52004-06R15-00-KK-169PTVA/V

ANALOG COMB/PIP ADAPTER SCHEMATIC
(Used CTC169BL,BM,BN,HM,HN)

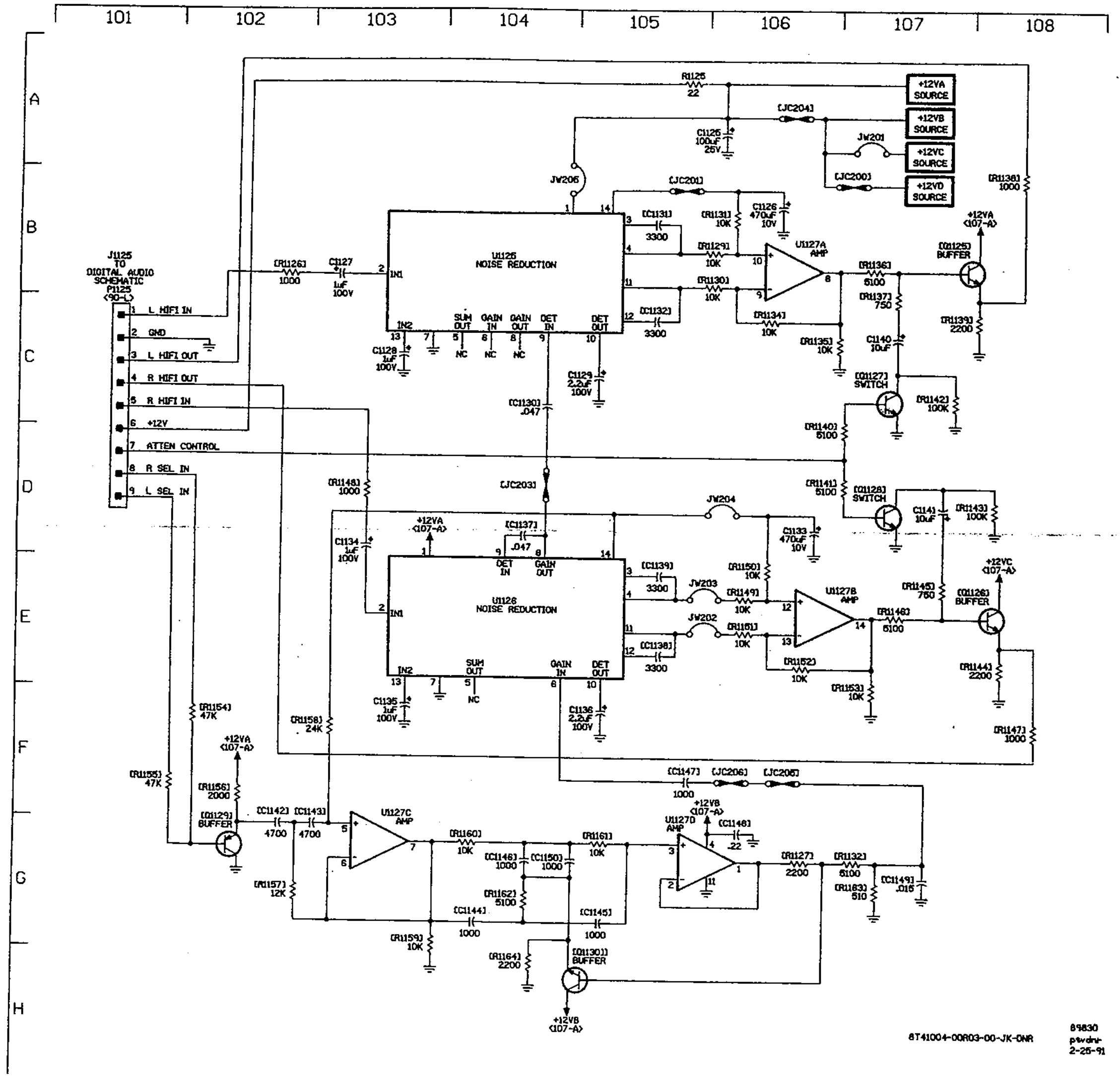

91
92
93
94
95
96
97
98
99
100
A
B
C
D
E
F
G
H
I
J
K
L
TO SIGNAL (ANALOG COMB) SCHEMATIC <23-L>
SELECTED VIDEO
S-LUMA
TV VIDEO
H. SYNC
SWITCHED VIDEO
CHROMA
V. SYNC
ENABLE
CHROMA
LUMA
CLOCK
DATA
RESET
SELECTED VIDEO
[JC410] (CTC169BN,HN ONLY)
E155
[JC431] (CTC169BN ONLY)
SWITCHED VIDEO (CTC169BN,HN)
SELECTED VIDEO (CTC169BN,HN)
E56
[R2606] 1300
R2604 1200
2X
[C2603]
L2602 3.9uH
[C2604] 22
DL2601 DELAY LINE
R2605 330
[C2606] 300
[R2601] 150
[C2602] 33
L2603 10uH
L2601 18uH NOTCH FREQ
R2603 500 NOTCH DEPTH
[R2607] 750
[R2609] 100
C2601 1000
U2601 COMB FILTER
0dB
20dB
4.20V
4.10V
1.03V
8 CHROMA 6.72V
7 LUMINANCE 6.68V
+12VL <72-E>
+12VK <72-D>
[JC432] (CTC169BH ONLY)
[JC432] (CTC169BH ONLY)
[JC409] (CTC169BN ONLY)
JV411 (CTC169BN ONLY)
+5VE <72-D>
8T52004-03R21-00-KK-169PTVANAC
JW6400
JS6400
PIP ADAPTER PCB
JW610
GROUND STRUCTURE
JW602
E53
JW601
JW608
JW604
JW605
JW611
+5V SOURCE
+12V SOURCE
R6414 1300
JW603
E68
[JC612]
E69
[Q6404] S-LUMA SWITCH
[R6405] 680
[R6409] 10K
[Q6401] S-LUMA AMP
[R6402] 2200
[R6404] 10K
[C6402] 47
[R6403] 27K
[R6401] 1500
L6401 47uH
[R6444] 1000
[Q6402] S-LUMA SWITCH
[Q6403] S-LUMA SWITCH
[R6406] 22K
[R6407] 4700
[R6408] 13K
C6401 1uF 100V
+12V <96-I>
J6402 TO S-PIP SCHEMATIC J8002 <181-B>
R6443 3600
[Q6405] CHROMA BUFFER
[R6410] 3900
[R6411] 3300
[R6412] 1500
C6404 10uF 25V
R6416 10K
+5V <96-I>
+12V <96-I>
J6403 TO S-PIP SCHEMATIC J8001 <181-B>
RESET
ENABLE
+12V
DATA
CLOCK
GND
V. SYNC
H. SYNC
J6404 TO CONVERGENCE SCHEMATIC J8203 <109-I>
J6401 TO S-PIP SCHEMATIC J8003 <216-F>

SCHEMATIC NOTES

1. RESISTORS
   - A. SURFACE MOUNTED 1206'S ARE 1/8W, 5% TOLERANCE, 0805'S ARE 1/10W, 5% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
   - B. AXIAL LEADED ARE 1/4W, 5% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
   - C. VALUES ARE IN OHMS. K=X1000, M=X1,000,000.
2. CAPACITORS
   - A. VALUES 1.0 AND ABOVE ARE IN pF, UNLESS OTHERWISE SPECIFIED.
   - B. VALUES BELOW 1.0 ARE IN uF, UNLESS OTHERWISE SPECIFIED.
   - C. FOR TOLERANCE INFORMATION LOOK IN THE PARTS LIST, UNLESS OTHERWISE SPECIFIED.
   - D. ALL ARE 50V, UNLESS OTHERWISE SPECIFIED.
3. SYMBOLS
   - A. ↗TP INDICATES SERVICE TEST POINT.
   - B. ⏚X INDICATES COLD GROUND.
   - C. ▽X INDICATES HOT GROUND.
   - D. ■ INDICATES CONNECTION POINT VIA A WIRE WRAP STAKE.
   - E. ◎ INDICATES CONNECTION POINT VIA A POINT TO POINT INSULATED WIRE.
   - F. [ ] INDICATES A SURFACE MOUNTED (1206 TYPE) "CHIP" ON THE COPPER SIDE OF THE PRINTED CIRCUIT BOARD.
   - G. / \ INDICATES A SURFACE MOUNTED (0805 TYPE) "MINI CHIP" ON THE COPPER SIDE OF THE PRINTED CIRCUIT BOARD.
   - H. → INDICATES SIGNAL FLOW DIRECTION, NOT NECESSARILY CURRENT FLOW.
   - I. < > INDICATES SCHEMATIC ZONE LOCATOR.
   - J. JW INDICATES JUMPER WIRE.
   - K. JC INDICATES ZERO OHM JUMPER CHIP.

6T49001-00R06-00-KK-169PTVADPT

AUDIO DNR SCHEMATIC
(Used CTC169BL, BM, BN, BP Only)


101
102
103
104
105
106
107
108
A
B
C
D
E
F
G
H
J1125 TO DIGITAL AUDIO SCHEMATIC P1125 <90-L>
1 L HIFI IN
2 GND
3 L HIFI OUT
4 R HIFI OUT
5 R HIFI IN
6 +12V
7 ATTEN CONTROL
8 R SEL IN
9 L SEL IN
R1125 22
+12VA SOURCE
+12VB SOURCE
+12VC SOURCE
+12VD SOURCE
[JC204]
JW201
[JC200]
JW206
[JC201]
U1126 NOISE REDUCTION
U1127A AMP
U1127B AMP
U1127C AMP
U1127D AMP
U1128 NOISE REDUCTION
[Q1125] BUFFER
[Q1127] SWITCH
[Q1128] SWITCH
[Q1126] BUFFER
[Q1129] BUFFER
[Q1130] BUFFER
[JC203]
JW204
JW203
JW202
[JC206]
[JC208]
+12VA <107-A>
+12VB <107-A>
+12VC <107-A>
6T41004-00R03-00-JK-DNR
89830 p4-dnr 2-25-91

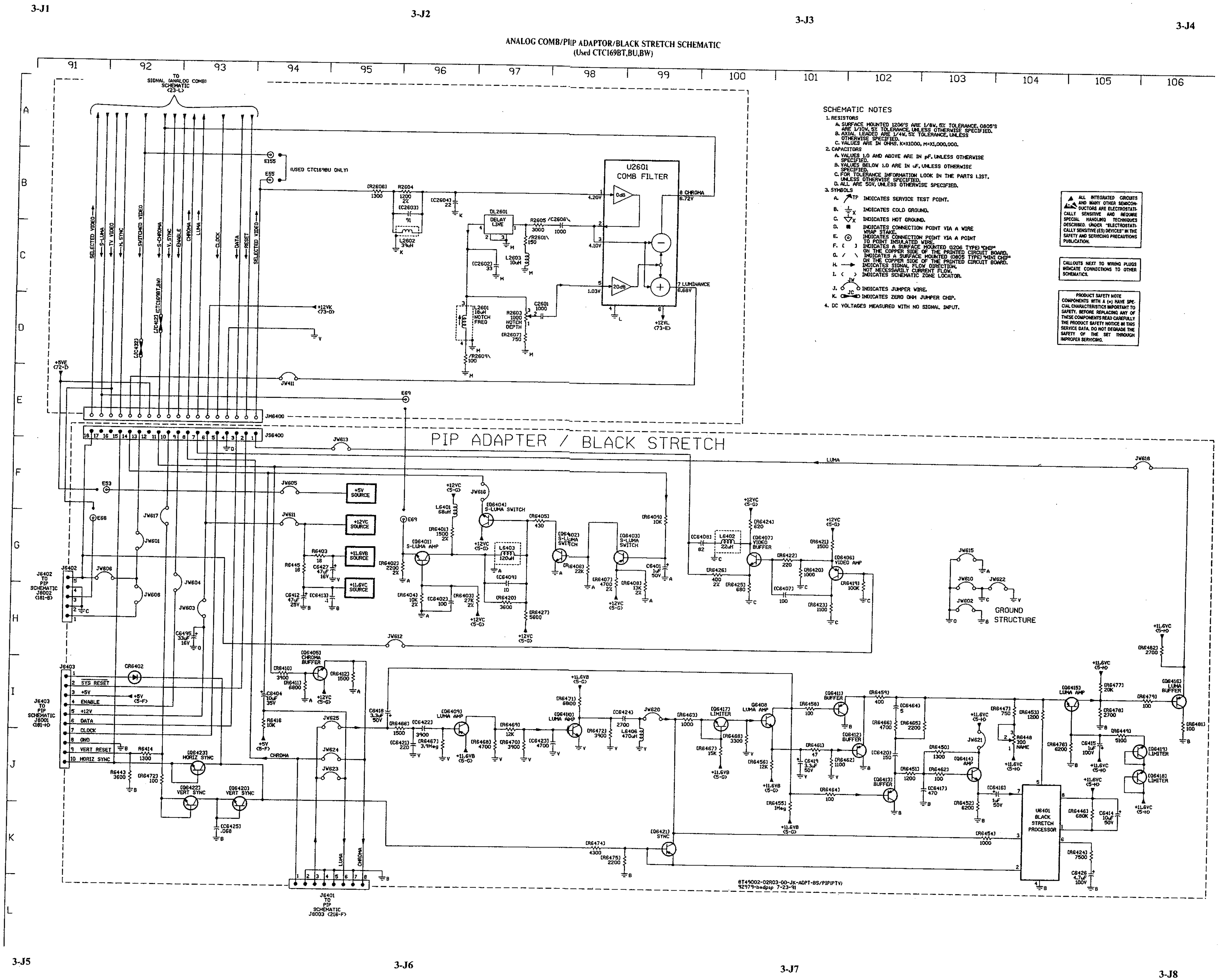
ALL INTEGRATED CIRCUITS AND MANY OTHER SEMICONDUCTORS ARE ELECTROSTATICALLY SENSITIVE AND REQUIRE SPECIAL HANDLING TECHNIQUES DESCRIBED UNDER "ELECTROSTATICALLY SENSITIVE (ES) DEVICES" IN THE SAFETY AND SERVICING PRECAUTIONS PUBLICATION.

CALLOUTS NEXT TO WIRING PLUGS INDICATE CONNECTIONS TO OTHER SCHEMATICS.

PRODUCT SAFETY NOTE
COMPONENTS WITH A (*) HAVE SPECIAL CHARACTERISTICS IMPORTANT TO SAFETY. BEFORE REPLACING ANY OF THESE COMPONENTS READ CAREFULLY THE PRODUCT SAFETY NOTICE IN THIS SERVICE DATA. DO NOT DEGRADE THE SAFETY OF THE SET THROUGH IMPROPER SERVICING.

ANALOG COMB/PIP ADAPTOR/BLACK STRETCH SCHEMATIC

(Used CTC169BT,BU,BW)


3-J1
3-J2
3-J3
3-J4
3-J5
3-J6
3-J7
3-J8
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
A
B
C
D
E
F
G
H
I
J
K
L
TO SIGNAL (ANALOG COMB) SCHEMATIC <23-L>
SELECTED VIDEO
S-LUMA
TV VIDEO
H. SYNC
SWITCHED VIDEO
S-CHROMA
V. SYNC
ENABLE
CHROMA
LUMA
CLOCK
DATA
RESET
SELECTED VIDEO
(USED CTC169BU ONLY)
E155
E55
U2601 COMB FILTER
0dB
20dB
8 CHROMA 6.72V
7 LUMINANCE 6.68V
4.20V
4.10V
1.03V
DL2601 DELAY LINE
L2601 18uH NOTCH FREQ
R2603 1000 NOTCH DEPTH
+12VL <73-E>
+12VK <73-D>
+5VE <72-D>
JW411
E69
JW6400
JS6400
PIP ADAPTER / BLACK STRETCH
JW613
LUMA
JW616
E53
E68
JW605
JW611
JW617
JW601
JW606
JW604
JW603
+5V SOURCE
+12VC SOURCE
+11.6VB SOURCE
+11.6VC SOURCE
Q6401 S-LUMA AMP
Q6404 S-LUMA SWITCH
Q6402 S-LUMA SWITCH
Q6403 S-LUMA SWITCH
Q6407 VIDEO BUFFER
Q6406 VIDEO AMP
JW615
JW610
JW622
JW602
GROUND STRUCTURE
J6402 TO PIP SCHEMATIC J8002 (18I-B)
JW612
Q6405 CHROMA BUFFER
J6403
1
2 SYS RESET
3 +5V
4 ENABLE
5 +12V
6 DATA
7 CLOCK
8 GND
9 VERT RESET
10 HORIZ SYNC
J6403 TO PIP SCHEMATIC J8001 (18I-H)
CR6402
Q6423 HORIZ SYNC
Q6422 VERT SYNC
Q6420 VERT SYNC
JW625
JW624
JW623
CHROMA
Q6409 LUMA AMP
Q6410 LUMA AMP
JW620
Q6417 LIMITER
Q6408 LUMA AMP
Q6411 BUFFER
Q6412 BUFFER
Q6413 BUFFER
Q6414 AMP
JW621
Q6421 SYNC
U6401 BLACK STRETCH PROCESSOR
Q6415 LUMA AMP
Q6416 LUMA BUFFER
Q6419 LIMITER
Q6418 LIMITER
J6401 TO PIP SCHEMATIC J8003 (21B-F)
8T49002-02R03-00-JK-ADPT-BS/PIP(PTV)
92979-bsdpip 7-23-91

SCHEMATIC NOTES

1. RESISTORS
   - A. SURFACE MOUNTED 1206'S ARE 1/8W, 5% TOLERANCE, 0805'S ARE 1/10W, 5% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
   - B. AXIAL LEADED ARE 1/4W, 5% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
   - C. VALUES ARE IN OHMS. K=X1000, M=X1,000,000.
2. CAPACITORS
   - A. VALUES 1.0 AND ABOVE ARE IN pF, UNLESS OTHERWISE SPECIFIED.
   - B. VALUES BELOW 1.0 ARE IN uF, UNLESS OTHERWISE SPECIFIED.
   - C. FOR TOLERANCE INFORMATION LOOK IN THE PARTS LIST, UNLESS OTHERWISE SPECIFIED.
   - D. ALL ARE 50V, UNLESS OTHERWISE SPECIFIED.
3. SYMBOLS
   - A. TP INDICATES SERVICE TEST POINT.
   - B. X INDICATES COLD GROUND.
   - C. X INDICATES HOT GROUND.
   - D. ■ INDICATES CONNECTION POINT VIA A WIRE WRAP STAKE.
   - E. ◎ INDICATES CONNECTION POINT VIA A POINT TO POINT INSULATED WIRE.
   - F. [ ] INDICATES A SURFACE MOUNTED (1206 TYPE) "CHIP" ON THE COPPER SIDE OF THE PRINTED CIRCUIT BOARD.
   - G. / \ INDICATES A SURFACE MOUNTED (0805 TYPE) "MINI CHIP" ON THE COPPER SIDE OF THE PRINTED CIRCUIT BOARD.
   - H. → INDICATES SIGNAL FLOW DIRECTION, NOT NECESSARILY CURRENT FLOW.
   - I. < > INDICATES SCHEMATIC ZONE LOCATOR.
   - J. JW INDICATES JUMPER WIRE.
   - K. JC INDICATES ZERO OHM JUMPER CHIP.
4. DC VOLTAGES MEASURED WITH NO SIGNAL INPUT.

⚠ ALL INTEGRATED CIRCUITS AND MANY OTHER SEMICONDUCTORS ARE ELECTROSTATICALLY SENSITIVE AND REQUIRE SPECIAL HANDLING TECHNIQUES DESCRIBED UNDER "ELECTROSTATICALLY SENSITIVE (ES) DEVICES" IN THE SAFETY AND SERVICING PRECAUTIONS PUBLICATION.

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PRODUCT SAFETY NOTE
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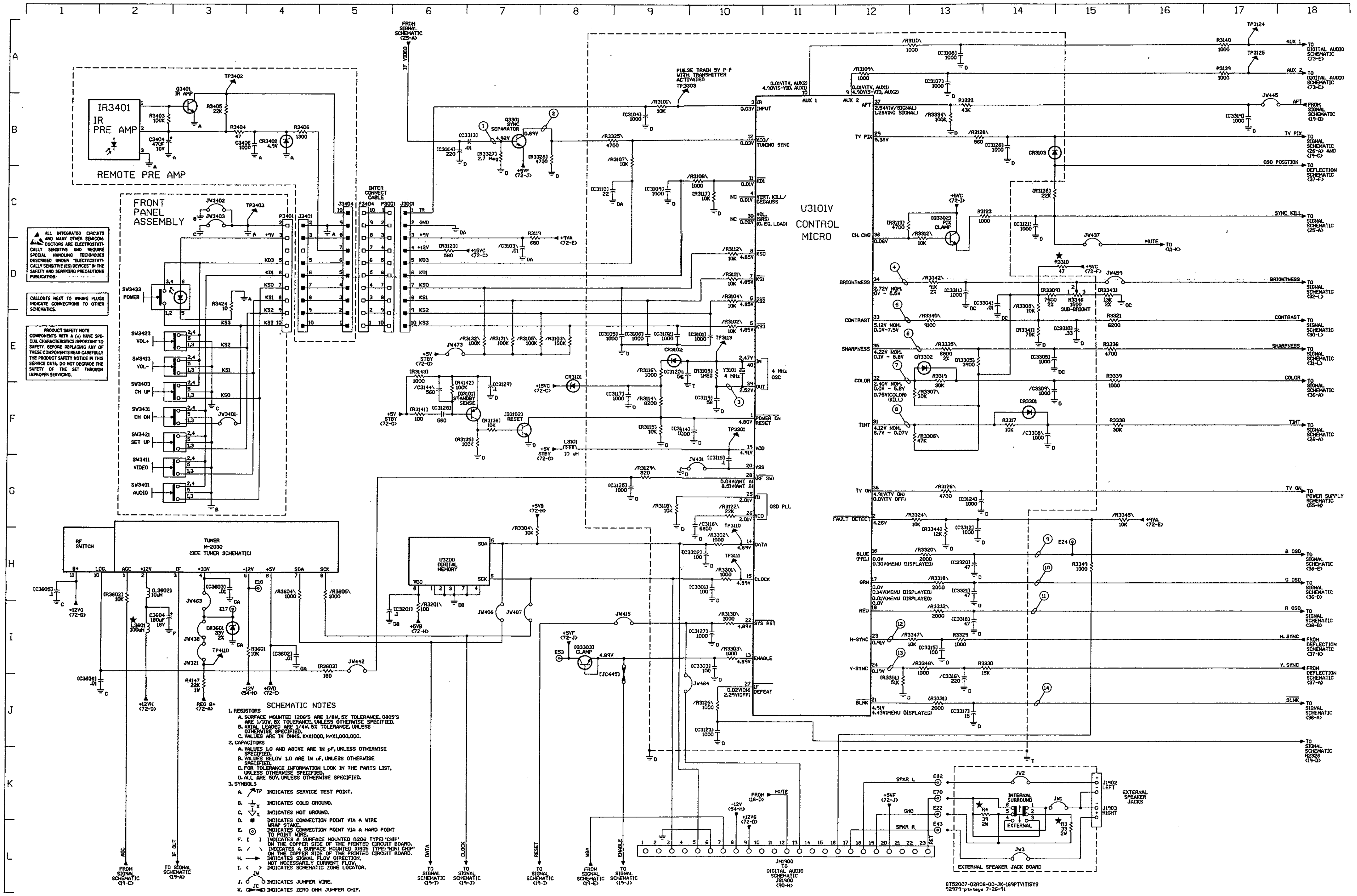
3-B1 3-B2 3-B3 3-B4

SYSTEM CONTROL SCHEMATIC
(Used CTC169BT,BU,BW)


IR3401
IR PRE AMP
REMOTE PRE AMP
Q3401 IR AMP
TP3402
FRONT PANEL ASSEMBLY
SW3433 POWER
SW3423 VOL+
SW3413 VOL-
SW3403 CH UP
SW3431 CH DN
SW3421 SET UP
SW3411 VIDEO
SW3401 AUDIO
JV3402
JV3403
TP3403
P3401
J3401
J3404
P3404
INTER CONNECT CABLE
P3001
J3001
FROM SIGNAL SCHEMATIC <25-A>
IF VIDEO
Q3301 SYNC SEPARATOR
PULSE TRAIN 5V P-P WITH TRANSMITTER ACTIVATED TP3303
U3101V CONTROL MICRO
IR INPUT
TUNING SYNC
VERT. KILL/ DEGAUSS
VOL (SRS) (EL EQ. LOAD)
4 MHz OSC
POWER ON RESET
OSD PLL
DATA
CLOCK
SYS RST
ENABLE
IF DEFEAT
AUX 1
AUX 2
AFT
TV PIX
CH. CHG
BRIGHTNESS
CONTRAST
SHARPNESS
COLOR
TINT
TV ON
FAULT DETECT
BLUE (PRL)
GRN
RED
H-SYNC
V-SYNC
BLNK
Q3302 PIX CLAMP
Q3101 STANDBY SENSE
Q3102 RESET
Q3303 CLAMP
RF SWITCH
TUNER M-2030 (SEE TUNER SCHEMATIC)
U3200 DIGITAL MEMORY
J41900 TO DIGITAL AUDIO SCHEMATIC J51900 <90-H>
EXTERNAL SPEAKER JACK BOARD
INTERNAL SURROUND
EXTERNAL
J1902 LEFT
J1903 RIGHT
EXTERNAL SPEAKER JACKS
TO DIGITAL AUDIO SCHEMATIC <73-E>
FROM SIGNAL SCHEMATIC <19-D>
TO SIGNAL SCHEMATIC <26-A> AND <19-C>
TO DEFLECTION SCHEMATIC <37-F>
OSD POSITION
SYNC KILL
TO POWER SUPPLY SCHEMATIC <55-H>
FROM DEFLECTION SCHEMATIC <37-K>
MUTE
AGC
IF OUT
RESET
WBA

ALL INTEGRATED CIRCUITS AND MANY OTHER SEMICONDUCTORS ARE ELECTROSTATICALLY SENSITIVE AND REQUIRE SPECIAL HANDLING TECHNIQUES DESCRIBED UNDER "ELECTROSTATICALLY SENSITIVE (ES) DEVICES" IN THE SAFETY AND SERVICING PRECAUTIONS PUBLICATION.

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   - B. AXIAL LEADED ARE 1/4W, 5% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
   - C. VALUES ARE IN OHMS. K=X1000, M=X1,000,000.
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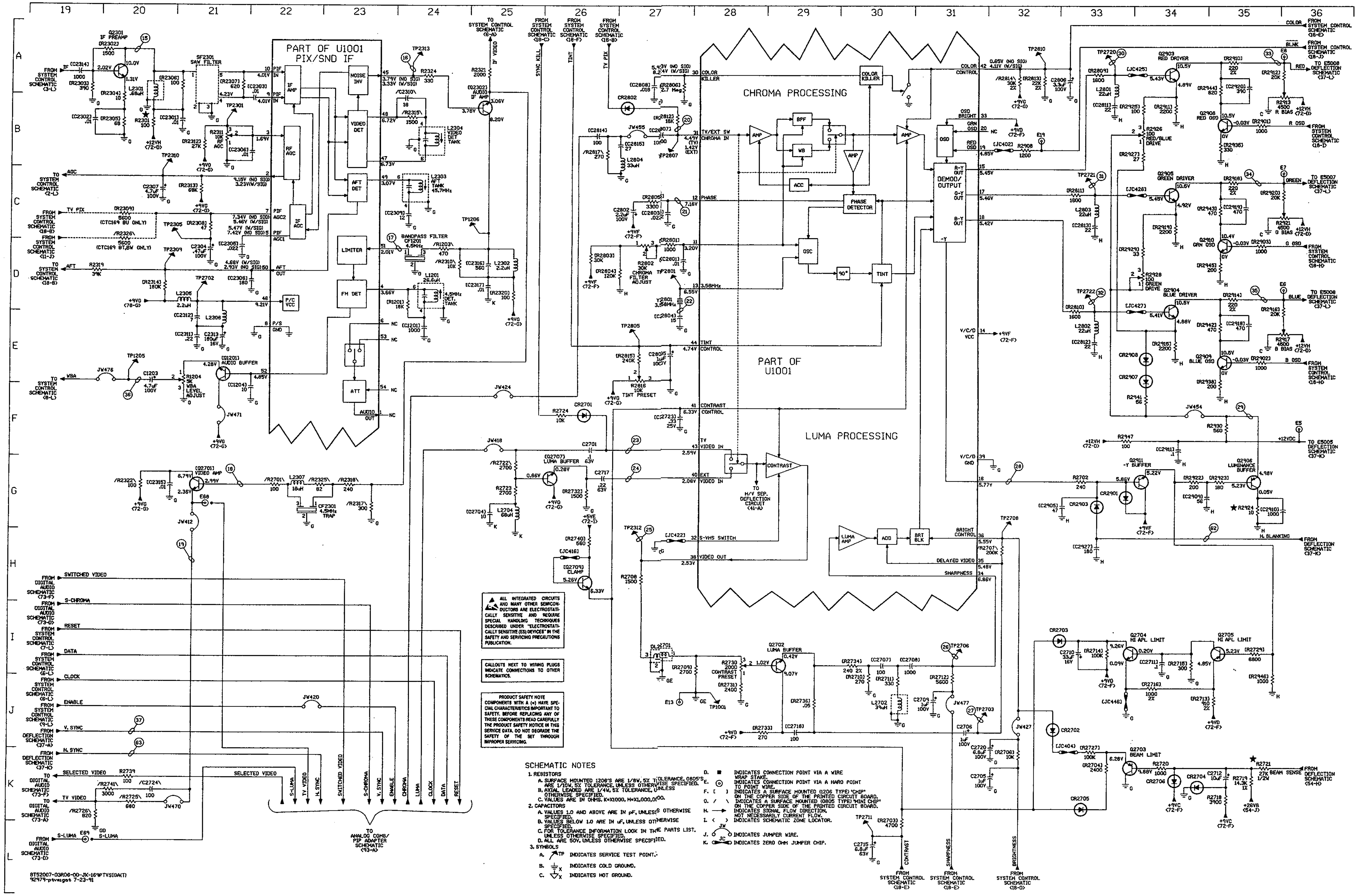
   - C. FOR TOLERANCE INFORMATION LOOK IN THE PARTS LIST, UNLESS OTHERWISE SPECIFIED.
   - D. ALL ARE 50V, UNLESS OTHERWISE SPECIFIED.
3. SYMBOLS
   - A. ↗TP INDICATES SERVICE TEST POINT.
   - B. ⏚X INDICATES COLD GROUND.
   - C. ▽X INDICATES HOT GROUND.
   - D. ■ INDICATES CONNECTION POINT VIA A WIRE WRAP STAKE.
   - E. ◎ INDICATES CONNECTION POINT VIA A HARD POINT TO POINT WIRE.
   - F. [ ] INDICATES A SURFACE MOUNTED (1206 TYPE) "CHIP" ON THE COPPER SIDE OF THE PRINTED CIRCUIT BOARD.
   - G. / \ INDICATES A SURFACE MOUNTED (0805 TYPE) "MINI CHIP" ON THE COPPER SIDE OF THE PRINTED CIRCUIT BOARD.
   - H. → INDICATES SIGNAL FLOW DIRECTION, NOT NECESSARILY CURRENT FLOW.
   - I. < > INDICATES SCHEMATIC ZONE LOCATOR.
   - J. JW INDICATES JUMPER WIRE.
   - K. JC INDICATES ZERO OHM JUMPER CHIP.

8T52007-02R06-00-JK-169PTV(T)SYS
92979-ptvtsys 7-26-91

3-B5 3-B6 3-B7 3-B8

SIGNAL SCHEMATIC (ANALOG COMB)
(Used CTC169BT,BU,BW)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A
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D
E
F
G
H
I
J
K
L
PART OF U1001
PIX/SND IF
IF AMP
NOISE INV
VIDEO DET
RF AGC
AFT DET
IF AGC
LIMITER
FM DET
P/C VCC
ATT
SF2301 SAW FILTER
Q2301 IF PREAMP
Q2302 AUDIO IF AMP
Q2201 AUDIO BUFFER
Q2701 VIDEO AMP
Q2707 LUMA BUFFER
Q2709 CLAMP
CHROMA PROCESSING
AMP
BPF
WB
ACC
PHASE DETECTOR
OSC
90°
TINT
COLOR KILLER
DEMOD/ OUTPUT
R-Y OUT
G-Y OUT
B-Y OUT
PART OF U1001
LUMA PROCESSING
CONTRAST
LUMA AMP
ADD
BRT BLK
TO H/V SEP. DEFLECTION CIRCUIT <41-A>
Q2702 LUMA BUFFER
R2730 2000 CONTRAST PRESET
R2816 10K TINT PRESET
R2802 30K CHROMA FILTER ADJUST
R1204 5K WBA LEVEL ADJUST
Q2903 RED DRIVER
Q2905 GREEN DRIVER
Q2904 BLUE DRIVER
Q2906 RED OSD
Q2910 GRN OSD
Q2909 BLUE OSD
R2926 100 RED/BLUE DRIVE
R2928 100 GREEN DRIVE
R2913 4600 R BIAS
R2921 4600 G BIAS
R2917 4600 B BIAS
Q2911 -Y BUFFER
Q2906 LUMINANCE BUFFER
Q2704 HI APL LIMIT
Q2705 HI APL LIMIT
Q2703 BEAM LIMIT
R2721 27K BEAM SENSE 1/2W
FROM SYSTEM CONTROL SCHEMATIC
TO SYSTEM CONTROL SCHEMATIC
FROM DEFLECTION SCHEMATIC
TO DEFLECTION SCHEMATIC
FROM DIGITAL AUDIO SCHEMATIC
TO DIGITAL AUDIO SCHEMATIC
TO ANALOG COMB/ PIP ADAPTER SCHEMATIC <93-A>
SWITCHED VIDEO
S-CHROMA
RESET
DATA
CLOCK
ENABLE
V. SYNC
H. SYNC
SELECTED VIDEO
TV VIDEO
S-LUMA
LUMA
CHROMA
AGC
TV PIX
AFT
WBA
IF VIDEO
SYNC KILL
TINT
COLOR
BLNK
RED
GREEN
BLUE
R OSD
G OSD
B OSD
H. BLANKING
CONTRAST
SHARPNESS
BRIGHTNESS
+12VDC
TO E5005
TO E5006
TO E5007
TO E5008

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SCHEMATIC NOTES

1. RESISTORS
   - A. SURFACE MOUNTED 1206'S ARE 1/8W, 5% TOLERANCE, 0805'S ARE 1/10W, 5% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
   - B. AXIAL LEADED ARE 1/4W, 5% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
   - C. VALUES ARE IN OHMS. K=X1000, M=X1,000,000.
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   - D. ALL ARE 50V, UNLESS OTHERWISE SPECIFIED.
3. SYMBOLS
   - A. ↗TP INDICATES SERVICE TEST POINT.
   - B. ⏚X INDICATES COLD GROUND.
   - C. ▽X INDICATES HOT GROUND.
   - D. ■ INDICATES CONNECTION POINT VIA A WIRE WRAP STAKE.
   - E. ⊙ INDICATES CONNECTION POINT VIA A HARD POINT TO POINT WIRE.
   - F. [ ] INDICATES A SURFACE MOUNTED (1206 TYPE) "CHIP" ON THE COPPER SIDE OF THE PRINTED CIRCUIT BOARD.
   - G. / \ INDICATES A SURFACE MOUNTED (0805 TYPE) "MINI CHIP" ON THE COPPER SIDE OF THE PRINTED CIRCUIT BOARD.
   - H. → INDICATES SIGNAL FLOW DIRECTION, NOT NECESSARILY CURRENT FLOW.
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   - J. JW INDICATES JUMPER WIRE.
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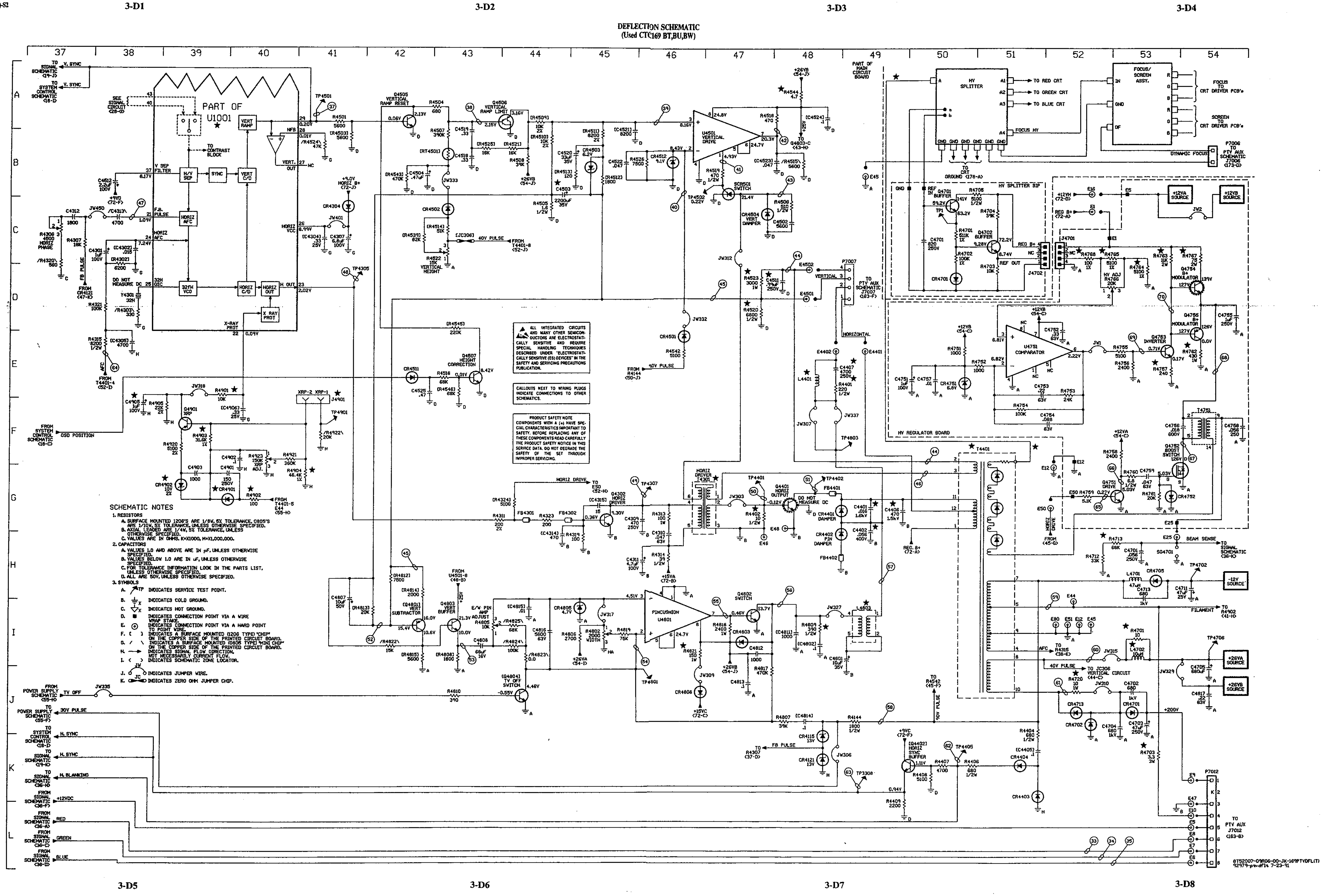
8T52007-03R06-00-JK-169PTVSIGA(T)
92979-ptvsigat 7-23-91

DEFLECTION SCHEMATIC
(Used CTC169 BT,BU,BW)


3-D1
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3-D6
3-D7
3-D8
PART OF U1001
VERT RAMP
H/V SEP
SYNC
VERT C/D
HORIZ AFC
32fH VCO
HORIZ C/D
HORIZ OUT
X RAY PROT
TO CONTRAST BLOCK
SEE SIGNAL CIRCUIT
Q4505 VERTICAL RAMP RESET
Q4506 VERTICAL RAMP LIMIT
U4501 VERTICAL DRIVE
SCR501 SWITCH
CR4504 VERT DAMPER
R4522 15K VERTICAL HEIGHT
Q4507 HEIGHT CORRECTION
Q4901 XRP
R4923 150K XRP ADJ.
Q4302 HORIZ DRIVER
T4301 HORIZ DRIVER
Q4401 HORIZ OUTPUT
DO NOT MEASURE DC
CR4401 DAMPER
CR4402 PIN DAMPER
T4401
Q4801 VERT SUBTRACTOR
Q4803 VERT BUFFER
R4805 10K E/W PIN AMP ADJUST
R4802 2000 WIDTH
U4801 PINCUSHION
Q4802 SWITCH
Q4804 TV OFF SWITCH
Q4402 HORIZ SYNC BUFFER
HV SPLITTER
TO RED CRT
TO GREEN CRT
TO BLUE CRT
FOCUS HV
FOCUS/SCREEN ASSY.
FOCUS TO CRT DRIVER PCB's
SCREEN TO CRT DRIVER PCB's
DYNAMIC FOCUS
TO CRT GROUND
HV SPLITTER SIP
Q4701 REF BUFFER
Q4702 BUFFER
U4751 COMPARATOR
Q4763 INVERTER
Q4754 B+ MODULATOR
Q4755 B+ MODULATOR
Q4751 DRIVE
Q4752 BOOST SWITCH
T4751
HV REGULATOR BOARD
R4768 HV ADJ
+12VA SOURCE
+12VB SOURCE
-12V SOURCE
+26VA SOURCE
+26VB SOURCE
BEAM SENSE
FILAMENT
P7006 TO PTV AUX SCHEMATIC J7006
P7007 TO PTV AUX SCHEMATIC J7007
P7012 TO PTV AUX J7012 (163-8)
FROM POWER SUPPLY SCHEMATIC TV OFF
TO POWER SUPPLY SCHEMATIC 30V PULSE
TO SYSTEM CONTROL SCHEMATIC H. SYNC
TO SIGNAL SCHEMATIC H. SYNC
TO SIGNAL SCHEMATIC H. BLANKING
FROM SIGNAL SCHEMATIC +12VDC
FROM SIGNAL SCHEMATIC RED
FROM SIGNAL SCHEMATIC GREEN
FROM SIGNAL SCHEMATIC BLUE
FROM SYSTEM CONTROL SCHEMATIC OSD POSITION
TO SIGNAL SCHEMATIC V. SYNC
TO SYSTEM CONTROL SCHEMATIC V. SYNC
HORIZ DRIVE
40V PULSE
FB PULSE
VERTICAL
HORIZONTAL
8T52007-09R06-00-JK-169PTVDFL(T)
92979-ptvdflt 7-23-91

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   I. < > INDICATES SCHEMATIC ZONE LOCATOR.
   J. JW INDICATES JUMPER WIRE.
   K. JC INDICATES ZERO OHM JUMPER CHIP.

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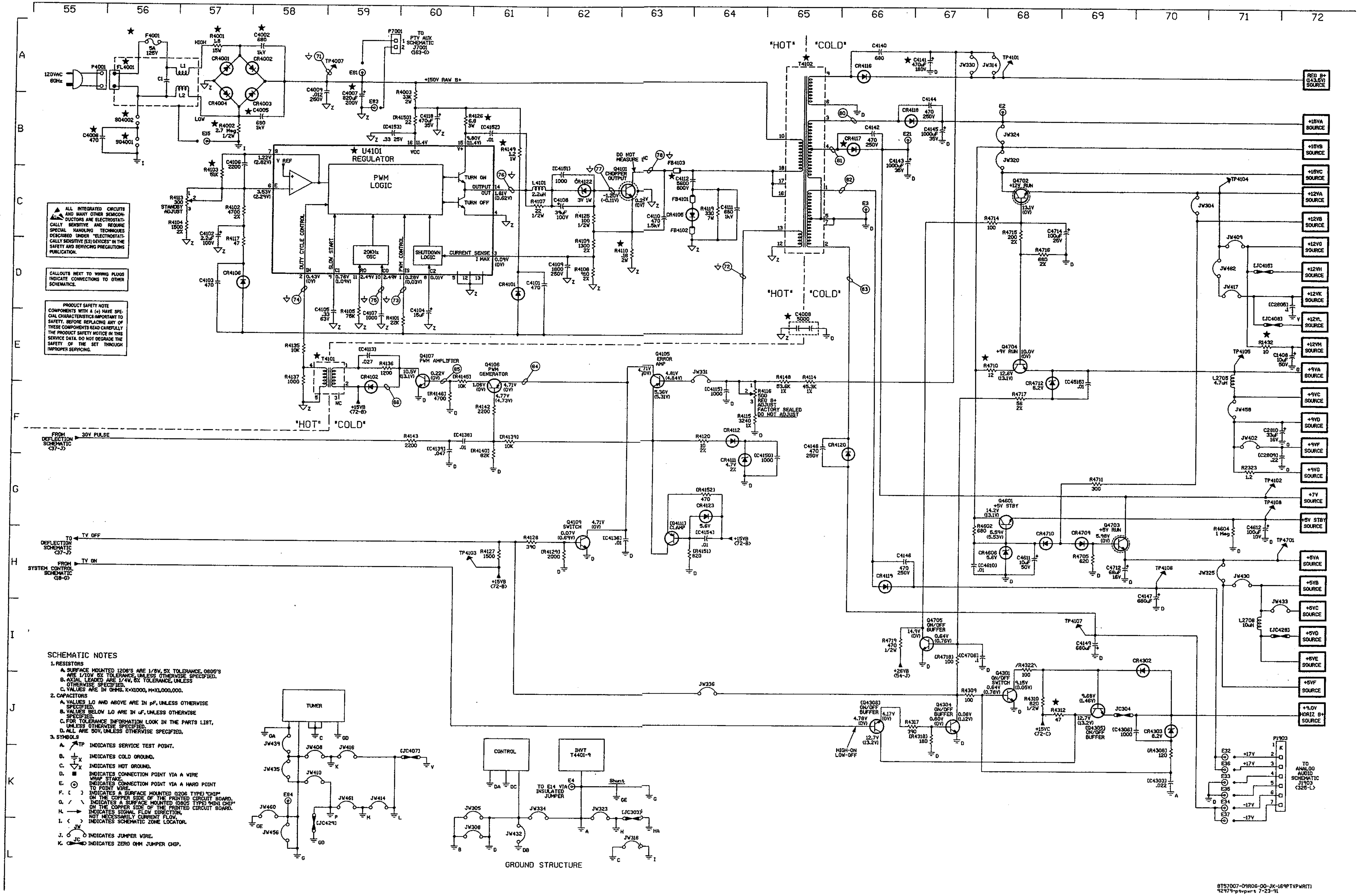
POWER SUPPLY SCHEMATIC
(Used CTC169BT,BU,BW)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K
L
120VAC 60Hz
P4001
FL4001
F4001 5A 125V
R4001 1.8 15W
HIGH
LOW
CR4001
CR4002
CR4003
CR4004
C4002 680 1kV
C4005 680 1kV
R4002 2.7 Meg 1/2W
C4006 470
S04001
S04002
E15
TP4007
E81
E83
C4009 .012 250V
C4007 820pF 200V
P7001
TO PTV AUX SCHEMATIC J7001 (163-G)
+150V RAW B+
R4003 33K 2W
U4101 REGULATOR
V REF
PWM LOGIC
20KHz OSC
SHUTDOWN LOGIC
DUTY CYCLE CONTROL
SLOW START
PWM CONTROL
CURRENT SENSE
I MAX
TURN ON
TURN OFF
OUTPUT OUT
VCC
R4113 300 STANDBY ADJUST
R4103 51K
R4102 4700 2%
R4104 1500 2%
C4102 2.2µF 100V
R4117 47
C4106 2200
C4103 470
CR4106
C4105 .33 63V
R4105 75K
C4107 1000
R4101 22K
C4104 15pF
R4126 6.8 3W
R4149 1.2 1W
C4118 470µF 35V
L4101 2.2uH
R4107 2Ω 1/2W
C4108 39pF 100V
CR4122
R4125 100 1/2W
C4109 1800 250V
R4109 1300 2%
R4106 910 2%
CR4101
C4101 470
Q4101 CHOPPER OUTPUT
DO NOT MEASURE
R4110 .18 2W
C4110 470 1.5kV
CR4108
R4119 330 7W
C4111 680 1kV
C4112 5600 800V
FB4101
FB4102
FB4103
"HOT"
"COLD"
T4102
T4101
C4008 5000
R4135 10K
R4137 1000
R4136 1200
CR4102
Q4107 PWM AMPLIFIER
Q4106 PWM GENERATOR
Q4105 ERROR AMP
R4142 2200
R4146 4700
+15VB (72-B)
FROM DEFLECTION SCHEMATIC (37-J)
30V PULSE
R4143 2200
C4139 .047
C4138 .01
R4140 82K
R4139 10K
JW331
C4115 1000
R4116 500 RED B+ ADJUST FACTORY SEALED DO NOT ADJUST
R4115 3240 1%
R4148 53.6K 1%
R4114 45.3K 1%
R4120 10 2%
CR4112
CR4111 4.7V 2%
C4150 1000
C4148 470 250V
CR4120
Q4111 CLAMP
R4152 470
CR4123 5.6V
C4154 .01
R4151 820
TO DEFLECTION SCHEMATIC (37-J)
TV OFF
FROM SYSTEM CONTROL SCHEMATIC (18-D)
TV ON
Q4109 SWITCH
R4128 390
R4129 2000
R4127 1500
TP4103
C4136 .01
JW336
C4140 680
CR4116
C4141 470µF 180V
JW330
JW314
TP4101
C4144 470 250V
CR4118
C4145 1000µF 35V
C4142 470 250V
CR4117
C4143 1000µF 35V
E21
E2
E3
JW324
JW320
Q4702 +12V RUN
R4714 100
R4715 200 2%
C4714 100µF 25V
R4716 680 2%
Q4704 +9V RUN
R4710 12
CR4712 8.2V
C4516 .01
R4717 56 2%
R4711 300
Q4601 +5V STBY
R4602 680
CR4606 5.6V
C4610 .01
C4611 10µF 50V
CR4710
CR4709
Q4703 +5V RUN
R4705 620
C4712 68µF 16V
C4146 470 250V
CR4119
C4147 680µF
TP4107
C4149 680µF
Q4705 ON/OFF BUFFER
R4719 470 1/2W
CR4718 100
C4706 .1
+26VB (54-J)
Q4301 ON/OFF SWITCH
R4309 100
R4322 100
R4310 820 1/2W
R4312 47
+15VC (72-C)
CR4302
Q4305 ON/OFF BUFFER
JC304
C4306 1000
CR4303 8.2V
R4308 120
C4303 .022
Q4303 ON/OFF BUFFER
Q4304 ON/OFF BUFFER
R4317 390
R4318 180
HIGH-ON LOW-OFF
JW304
TP4104
JW409
JC416
JW462
JW417
C2806 .1
JC408
R1432 10
C1408 10µF 50V
TP4105
L2705 4.7uH
JW458
C2810 33µF 16V
JW402
C2809 .22
R2323 1.2
TP4102
TP4108
R4604 1 Meg
C4612 100µF 10V
TP4701
JW325
JW430
JW433
L2706 10uH
JC428
RED B+ (143.5V) SOURCE
+15VA SOURCE
+15VB SOURCE
+15VC SOURCE
+12VA SOURCE
+12VB SOURCE
+12VD SOURCE
+12VH SOURCE
+12VK SOURCE
+12VL SOURCE
+12VM SOURCE
+9VA SOURCE
+9VC SOURCE
+9VD SOURCE
+9VF SOURCE
+9VG SOURCE
+7V SOURCE
+5V STBY SOURCE
+5VA SOURCE
+5VB SOURCE
+5VC SOURCE
+5VD SOURCE
+5VE SOURCE
+5VF SOURCE
+9.0V HORIZ B+ SOURCE
P1903
TO ANALOG AUDIO SCHEMATIC J1903 (326-L)
+17V
-17V
E32
E36
E33
E35
E34
E37
TUNER
JW439
JW435
JW408
JW416
JW410
JC407
JW460
JW456
E84
JW461
JW414
JC424
CONTROL
IHVT T4401-9
TO E14 VIA INSULATED JUMPER
E4
Shunt
JW305
JW308
JW334
JW432
JW323
JC303
JW316
GROUND STRUCTURE

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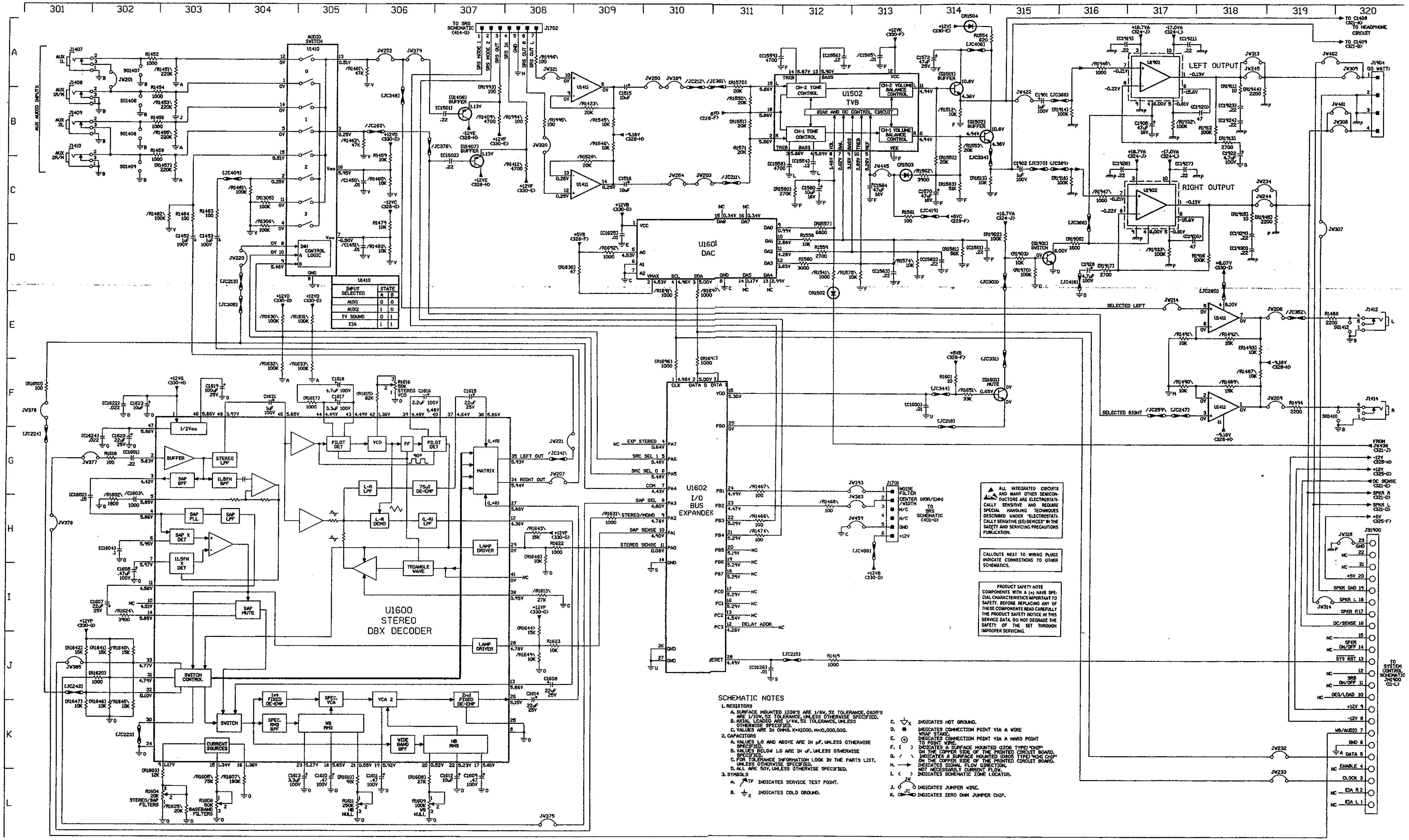
8T57007-09R06-00-JK-169PTVPWR(T)
92979-ptvpwrt 7-23-91

3-F1 3-F2 3-F3 3-F4

AUDIO-ANALOG STEREO/10W AMP SCHEMATIC (1 of 2)
(Used CTC169BT)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I
J
K
L
AUX AUDIO INPUTS
AUDIO SWITCH U1410
INH CONTROL LOGIC
U1410
INPUT SELECTED
STATE
AUX1
AUX2
TV SOUND
EIA
TO SRS SCHEMATIC (414-D)
J1702
SRS MODE 1
SRS MODE 2
SRS OUT
SRS IN
GND
SRS OUT R
SRS OUT L
U1411
U1502 TVB
CH-2 TONE CONTROL
CH-1 TONE CONTROL
CH-2 VOLUME BALANCE CONTROL
CH-1 VOLUME BALANCE CONTROL
BIAS AND DC CONTROL CIRCUIT
U1601 DAC
U1901
LEFT OUTPUT
U1902
RIGHT OUTPUT
TO CI408 (321-D) TO HEADPHONE CIRCUIT
TO CI409 (321-D)
J1904 (10 WATT)
SELECTED LEFT
SELECTED RIGHT
J1412
J1414
U1600 STEREO DBX DECODER
1/2Voo
BUFFER
STEREO LPF
SAP BPF
11.5FH BPF
SAP PLL
SAP LPF
SAP X DET
11.5FH X DET
SAP MUTE
SWITCH CONTROL
PILOT DET
VCO
FF
L-R LPF
75uS DE-EMP
L-R DEMO
L-R LPF
TRIANGLE WAVE
MATRIX
LAMP DRIVER
1st FIXED DE-EMP
SPEC. VCA
VCA 2
2nd FIXED DE-EMP
SWITCH
SPEC. RMS BPF
WB RMS
WIDE BAND BPF
HB RMS
CURRENT SOURCES
STEREO/SAP FILTERS
BASEBAND FILTERS
HB NULL
WB NULL
U1602 I/O BUS EXPANDER
EXP STEREO
SRC SEL 1
SRC SEL 0
COM
SAP SEL
STEREO/MONO
SAP SENSE
STEREO SENSE
DELAY ADDR
RESET
J1701
NOISE FILTER
CENTER (HOR/EHM) /WIDTH
TO SRS SCHEMATIC (401-D)
FROM JW436 (321-J)
J31900
TO SYSTEM CONTROL SCHEMATIC (N1900 (11-L)
DC/SENSE
SPKR ON/OFF
SYS RST
SRS ON/OFF
DEO/LOAD
WB/AUDIO
DATA
ENABLE
CLOCK
EIA R 2
EIA L 1
NC

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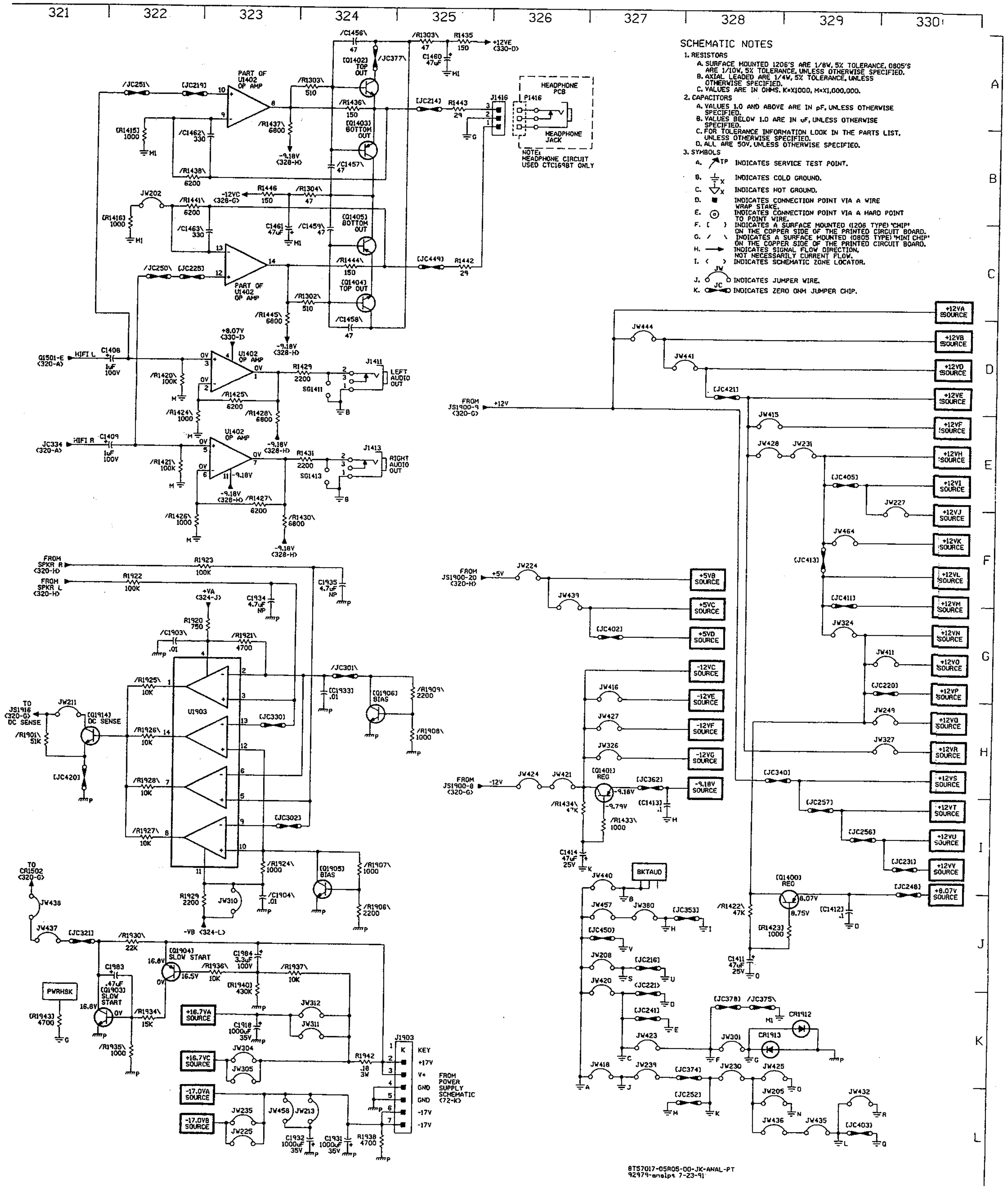
8TS7017-04R05-00-JK-ANAL-SRS-PT
92979-analsrspt 7-23-91

3-F5 3-F6 3-F7 3-F8

3-G1 3-G2

AUDIO-ANALOG STEREO/10W AMP SCHEMATIC (2 of 2)
(Used CTC169BT)


321
322
323
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325
326
327
328
329
330
A
B
C
D
E
F
G
H
I
J
K
L
PART OF U1402 OP AMP
HEADPHONE PCB
HEADPHONE JACK
NOTE: HEADPHONE CIRCUIT USED CTC169BT ONLY
HIFI L
HIFI R
LEFT AUDIO OUT
RIGHT AUDIO OUT
FROM SPKR R
FROM SPKR L
U1903
DC SENSE
BIAS
SLOW START
PWRHSK
BKTAUD
REG
KEY
FROM POWER SUPPLY SCHEMATIC
+12VA SOURCE
+12VB SOURCE
+12VD SOURCE
+12VE SOURCE
+12VF SOURCE
+12VH SOURCE
+12VI SOURCE
+12VJ SOURCE
+12VK SOURCE
+12VL SOURCE
+12VM SOURCE
+12VN SOURCE
+12VO SOURCE
+12VP SOURCE
+12VQ SOURCE
+12VR SOURCE
+12VS SOURCE
+12VT SOURCE
+12VU SOURCE
+12VV SOURCE
+8.07V SOURCE
+5VB SOURCE
+5VC SOURCE
+5VD SOURCE
-12VC SOURCE
-12VE SOURCE
-12VF SOURCE
-12VG SOURCE
-9.18V SOURCE
+18.7VA SOURCE
+16.7VC SOURCE
-17.0VA SOURCE
-17.0VB SOURCE
8TS7017-05R05-00-JK-ANAL-PT
92479-anslps 7-23-91

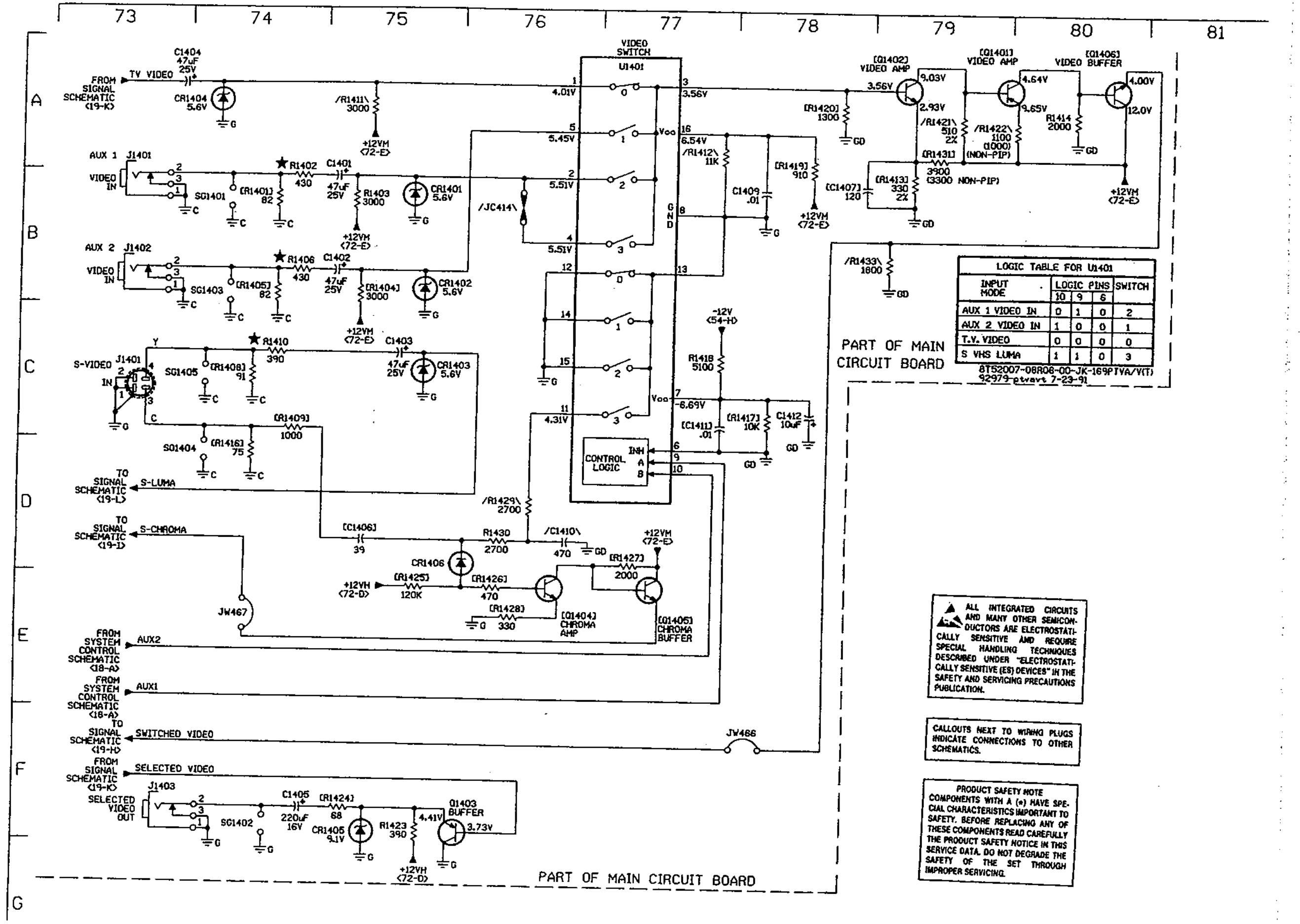
SCHEMATIC NOTES

1. RESISTORS
   - A. SURFACE MOUNTED 1206'S ARE 1/8W, 5% TOLERANCE, 0805'S ARE 1/10W, 5% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
   - B. AXIAL LEADED ARE 1/4W, 5% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
   - C. VALUES ARE IN OHMS. K=X1000, M=X1,000,000.
2. CAPACITORS
   - A. VALUES 1.0 AND ABOVE ARE IN pF, UNLESS OTHERWISE SPECIFIED.
   - B. VALUES BELOW 1.0 ARE IN uF, UNLESS OTHERWISE SPECIFIED.
   - C. FOR TOLERANCE INFORMATION LOOK IN THE PARTS LIST, UNLESS OTHERWISE SPECIFIED.
   - D. ALL ARE 50V, UNLESS OTHERWISE SPECIFIED.
3. SYMBOLS
   - A. ↗TP INDICATES SERVICE TEST POINT.
   - B. ⏚X INDICATES COLD GROUND.
   - C. ▽X INDICATES HOT GROUND.
   - D. ■ INDICATES CONNECTION POINT VIA A WIRE WRAP STAKE.
   - E. ⊙ INDICATES CONNECTION POINT VIA A HARD POINT TO POINT WIRE.
   - F. [ ] INDICATES A SURFACE MOUNTED (1206 TYPE) "CHIP" ON THE COPPER SIDE OF THE PRINTED CIRCUIT BOARD.
   - G. / \ INDICATES A SURFACE MOUNTED (0805 TYPE) "MINI CHIP" ON THE COPPER SIDE OF THE PRINTED CIRCUIT BOARD.
   - H. → INDICATES SIGNAL FLOW DIRECTION, NOT NECESSARILY CURRENT FLOW.
   - I. < > INDICATES SCHEMATIC ZONE LOCATOR.
   - J. JW INDICATES JUMPER WIRE.
   - K. JC INDICATES ZERO OHM JUMPER CHIP.

3-G5 3-G6

3-G3 3-G4

VIDEO INPUT SCHEMATIC
(Used CTC169BT,BU,BW)


73
74
75
76
77
78
79
80
81
A
B
C
D
E
F
G
FROM SIGNAL SCHEMATIC
TV VIDEO
AUX 1
AUX 2
VIDEO IN
S-VIDEO IN
VIDEO SWITCH U1401
CONTROL LOGIC
TO SIGNAL SCHEMATIC
S-LUMA
S-CHROMA
FROM SYSTEM CONTROL SCHEMATIC
AUX2
AUX1
SWITCHED VIDEO
SELECTED VIDEO
SELECTED VIDEO OUT
CHROMA AMP
CHROMA BUFFER
VIDEO AMP
VIDEO BUFFER
BUFFER
PART OF MAIN CIRCUIT BOARD

LOGIC TABLE FOR U1401				
INPUT MODE	LOGIC PINS			SWITCH
	10	9	6	
AUX 1 VIDEO IN	0	1	0	2
AUX 2 VIDEO IN	1	0	0	1
T.V. VIDEO	0	0	0	0
S VHS LUMA	1	1	0	3

8T52007-08R08-00-JK-169PTVA/V(T)
92979-ptvavt 7-23-91

PART OF MAIN CIRCUIT BOARD

ALL INTEGRATED CIRCUITS AND MANY OTHER SEMICONDUCTORS ARE ELECTROSTATICALLY SENSITIVE AND REQUIRE SPECIAL HANDLING TECHNIQUES DESCRIBED UNDER "ELECTROSTATICALLY SENSITIVE (ES) DEVICES" IN THE SAFETY AND SERVICING PRECAUTIONS PUBLICATION.

CALLOUTS NEXT TO WIRING PLUGS INDICATE CONNECTIONS TO OTHER SCHEMATICS.

PRODUCT SAFETY NOTE

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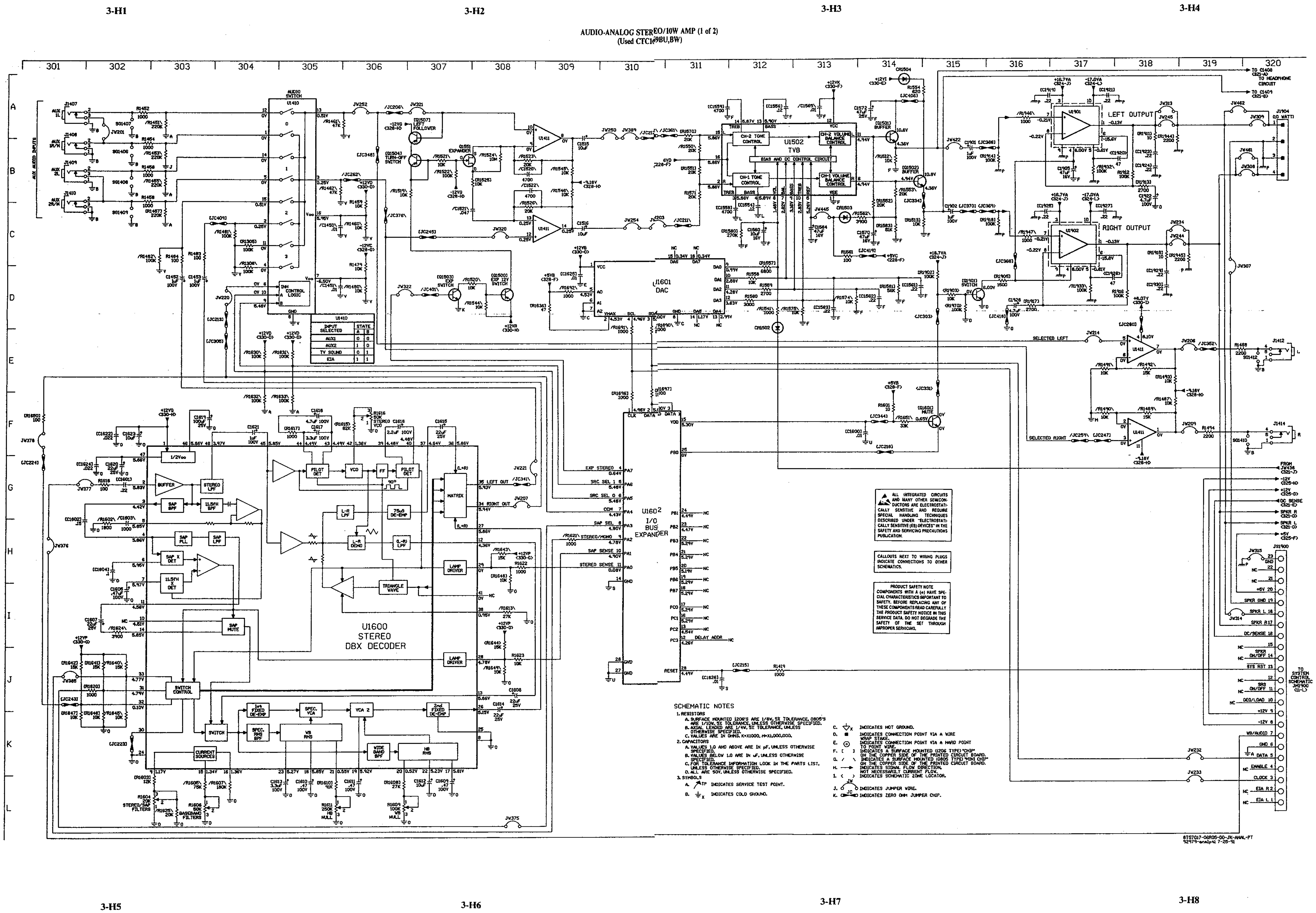
3-G7 3-G8

AUDIO-ANALOG STEREO/10W AMP (1 of 2)

(Used CTC169BU,BW)


3-H1
3-H2
3-H3
3-H4
3-H5
3-H6
3-H7
3-H8
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
A
B
C
D
E
F
G
H
I
J
K
L
AUX AUDIO INPUTS
AUDIO SWITCH U1410
CONTROL LOGIC
U1410
INPUT SELECTED
STATE A B
AUX1 0 0
AUX2 1 0
TV SOUND 0 1
EIA 1 1
LEFT FOLLOWER
TURN-OFF SWITCH
EXPANDER
U1411
EXP SWITCH
EXP 12V SWITCH
U1502 TVB
CH-2 TONE CONTROL
CH-1 TONE CONTROL
CH-2 VOLUME BALANCE CONTROL
CH-1 VOLUME BALANCE CONTROL
BIAS AND DC CONTROL CIRCUIT
BUFFER
U1601 DAC
U1901
U1902
LEFT OUTPUT
RIGHT OUTPUT
SELECTED LEFT
SELECTED RIGHT
MUTE
SWITCH
U1600 STEREO DBX DECODER
1/2Vcc
BUFFER
STEREO LPF
SAP BPF
11.5FH BPF
SAP PLL
SAP LPF
SAP X DET
11.5FH X DET
SAP MUTE
PILOT DET
VCO
FF
L-R LPF
75uS DE-EMP
L-R DEMO
L-R LPF
TRIANGLE WAVE
MATRIX
LAMP DRIVER
SWITCH CONTROL
SWITCH
1st FIXED DE-EMP
SPEC. VCA
VCA 2
2nd FIXED DE-EMP
SPEC. RMS BPF
WB RMS
WIDE BAND BPF
NB RMS
CURRENT SOURCES
STEREO/SAP FILTERS
BASEBAND FILTERS
WB NULL
NB NULL
LEFT OUT
RIGHT OUT
U1602 I/O BUS EXPANDER
EXP STEREO
SRC SEL 1
SRC SEL 0
CCH
SAP SEL
STEREO/MONO
SAP SENSE
STEREO SENSE
DELAY ADDR
RESET
CLK
DATA
VDD
TO C1408 TO HEADPHONE CIRCUIT
TO C1409
10 WATT
FROM JV436
+12V
-12V
DC SENSE
SPKR R
SPKR L
+5V
JS1900
GND
SPKR GND
SPKR L
SPKR R
DC/SENSE
SPKR ON/OFF
SYS RST
SRS ON/OFF
GEO/LOAD
WB/AUDIO
GND
DATA
ENABLE
CLOCK
EIA R
EIA L
NC
TO SYSTEM CONTROL SCHEMATIC JH1900
8T57017-06R05-00-JK-ANAL-PT
92979-analpt 7-26-91

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SCHEMATIC NOTES

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   - C. VALUES ARE IN OHMS. K=X1000, M=X1,000,000.
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   - A. VALUES 1.0 AND ABOVE ARE IN pF, UNLESS OTHERWISE SPECIFIED.
   - B. VALUES BELOW 1.0 ARE IN uF, UNLESS OTHERWISE SPECIFIED.
   - C. FOR TOLERANCE INFORMATION LOOK IN THE PARTS LIST, UNLESS OTHERWISE SPECIFIED.
   - D. ALL ARE 50V, UNLESS OTHERWISE SPECIFIED.
3. SYMBOLS
   - A. TP INDICATES SERVICE TEST POINT.
   - B. X INDICATES COLD GROUND.
   - C. X INDICATES HOT GROUND.
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   - E. ⊙ INDICATES CONNECTION POINT VIA A HARD POINT TO POINT WIRE.
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   - I. < > INDICATES SCHEMATIC ZONE LOCATOR.
   - J. JW INDICATES JUMPER WIRE.
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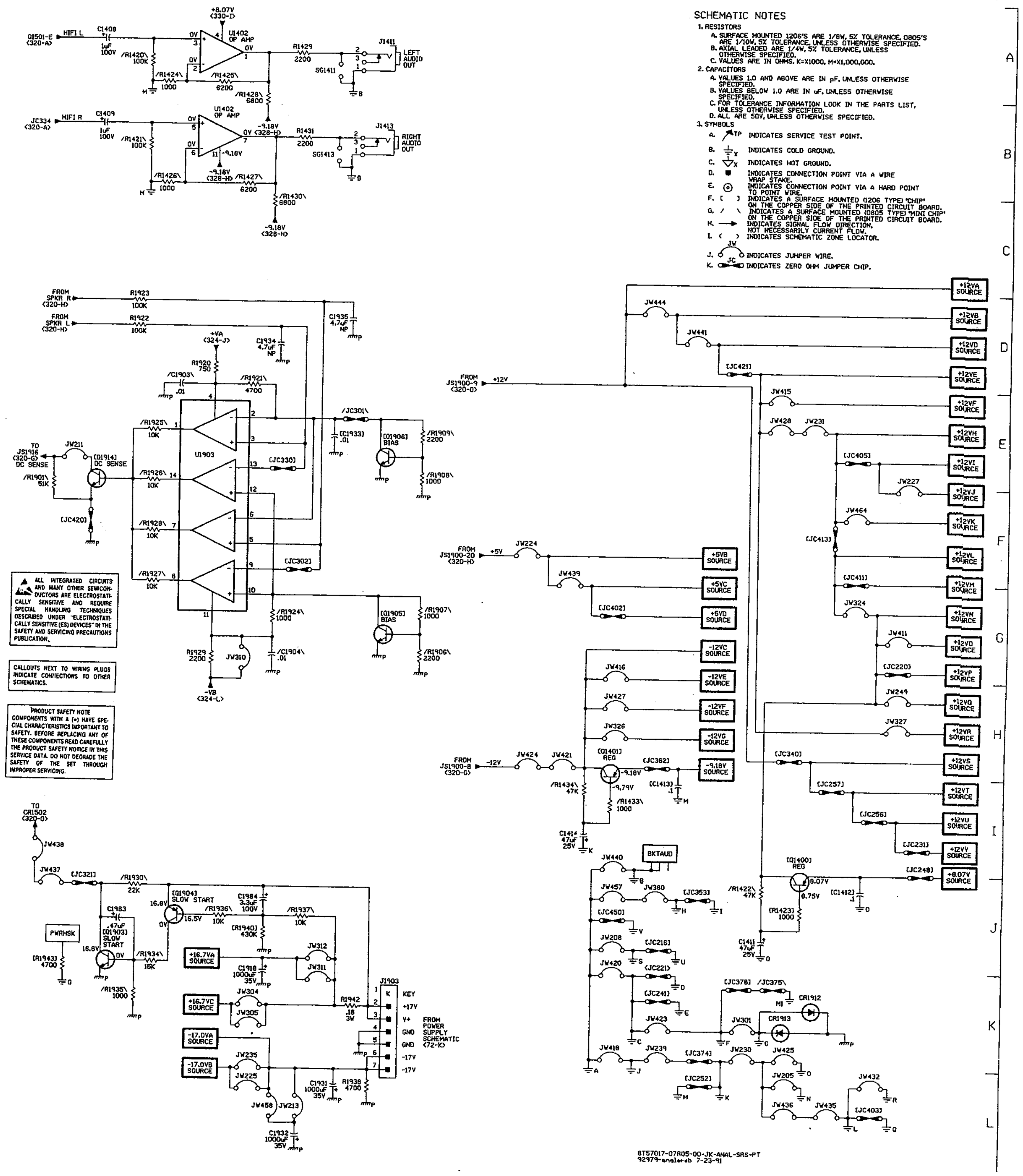
AUDIO-ANALOG STEREO/10W AMP SCHEMATIC (2 of 2)
(Used CTC169BU,BW)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J
K
L
U1402 OP AMP
J1411 LEFT AUDIO OUT
J1413 RIGHT AUDIO OUT
HIFI L
HIFI R
FROM SPKR R
FROM SPKR L
U1903
Q1914 DC SENSE
Q1906 BIAS
Q1905 BIAS
Q1904 SLOW START
Q1903 SLOW START
Q1401 REG
Q1400 REG
PWRHSK
BKTAUD
J1903
KEY
+17V
V+
GND
-17V
FROM POWER SUPPLY SCHEMATIC <72-K>
+12VA SOURCE
+12VB SOURCE
+12VD SOURCE
+12VE SOURCE
+12VF SOURCE
+12VH SOURCE
+12VI SOURCE
+12VJ SOURCE
+12VK SOURCE
+12VL SOURCE
+12VM SOURCE
+12VN SOURCE
+12VO SOURCE
+12VP SOURCE
+12VQ SOURCE
+12VR SOURCE
+12VS SOURCE
+12VT SOURCE
+12VU SOURCE
+12VV SOURCE
+8.07V SOURCE
+5VB SOURCE
+5VC SOURCE
+5VD SOURCE
-12VC SOURCE
-12VE SOURCE
-12VF SOURCE
-12VG SOURCE
-9.18V SOURCE
+16.7VA SOURCE
+16.7VC SOURCE
-17.0VA SOURCE
-17.0VB SOURCE
8T57017-07R05-00-JK-ANAL-SRS-PT

SCHEMATIC NOTES

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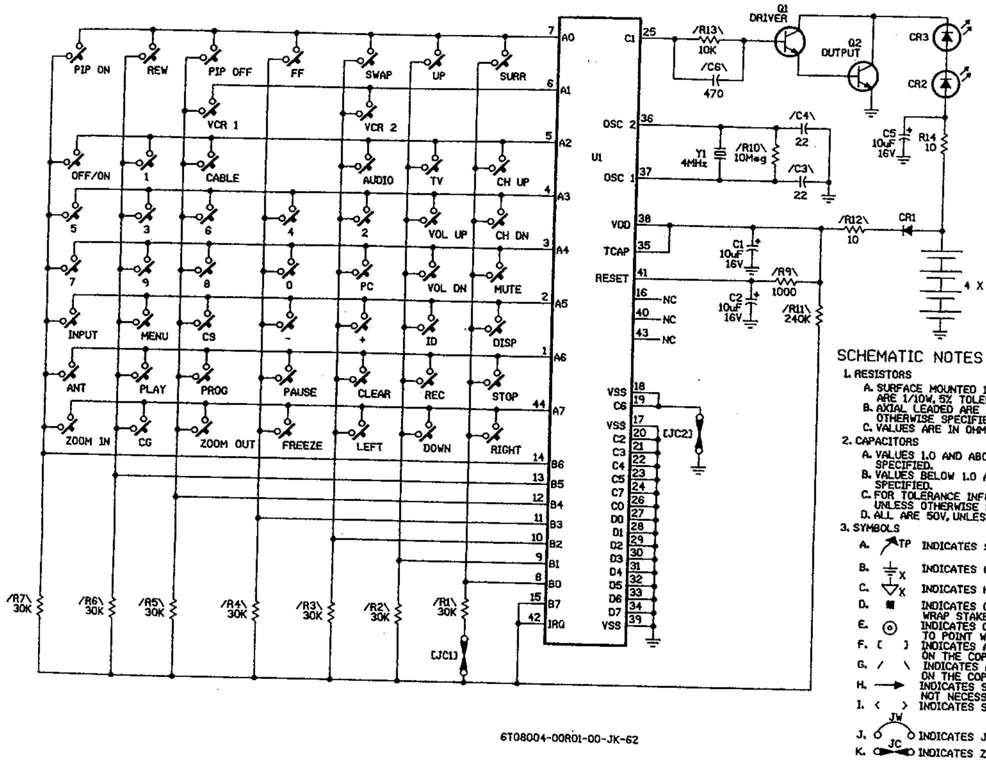
CRK62 REMOTE TRANSMITTER SCHEMATIC


PIP ON
REW
PIP OFF
FF
SWAP
UP
SURR
VCR 1
VCR 2
OFF/ON
CABLE
AUDIO
TV
CH UP
VOL UP
CH DN
PC
VOL DN
MUTE
ID
DISP
INPUT
MENU
CS
ANT
PLAY
PROG
PAUSE
CLEAR
REC
STOP
ZOOM IN
CG
ZOOM OUT
FREEZE
LEFT
DOWN
RIGHT
U1
OSC
VDD
TCAP
RESET
VSS
Y1 4MHz
Q1 DRIVER
Q2 OUTPUT
CR1
CR2
CR3
4 X AAA
6T08004-00R01-00-JK-62

SCHEMATIC NOTES

1. RESISTORS
   - A. SURFACE MOUNTED 1206'S ARE 1/8W, 5% TOLERANCE, 0805'S ARE 1/10W, 5% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
   - B. AXIAL LEADED ARE 1/4W, 5% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
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   - K. JC INDICATES ZERO OHM JUMPER CHIP.

BLANK

BLANK

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CALLOUTS NEXT TO WIRING PLUGS INDICATE CONNECTIONS TO OTHER SCHEMATICS.

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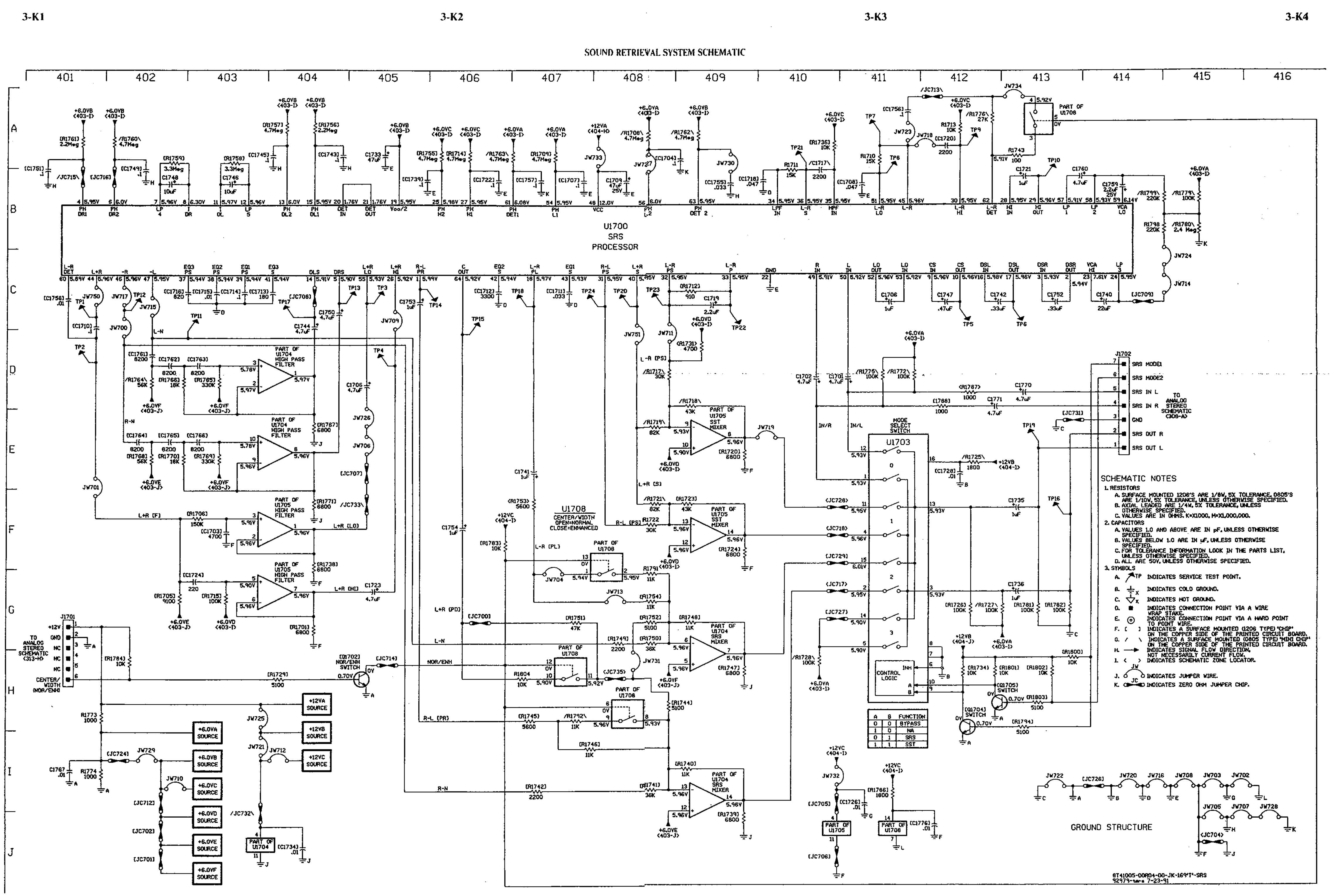
SOUND RETRIEVAL SYSTEM SCHEMATIC


3-K1
3-K2
3-K3
3-K4
3-K5
3-K6
3-K7
3-K8
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
A
B
C
D
E
F
G
H
I
J
U1700
SRS
PROCESSOR
U1703
MODE SELECT SWITCH
CONTROL LOGIC
U1708
CENTER/WIDTH
OPEN=NORMAL
CLOSE=ENHANCED
PART OF U1704 HIGH PASS FILTER
PART OF U1705 HIGH PASS FILTER
PART OF U1705 SST MIXER
PART OF U1704 SRS MIXER
J1701
TO ANALOG STEREO SCHEMATIC (313-H)
+12V
GND
NC
CENTER/WIDTH (NOR/ENH)
J1702
SRS MODE1
SRS MODE2
SRS IN L
SRS IN R
GND
SRS OUT R
SRS OUT L
TO ANALOG STEREO SCHEMATIC (308-A)
+6.0VA SOURCE
+6.0VB SOURCE
+6.0VC SOURCE
+6.0VD SOURCE
+6.0VE SOURCE
+6.0VF SOURCE
+12VA SOURCE
+12VB SOURCE
+12VC SOURCE
(Q1702) NOR/ENH SWITCH
(Q1704) SWITCH
(Q1705) SWITCH
GROUND STRUCTURE
8T41005-00R04-00-JK-169"T"-SRS
92979-tare 7-23-91

A	B	FUNCTION
0	0	BYPASS
1	0	NA
0	1	SRS
1	1	SST

SCHEMATIC NOTES

1. RESISTORS
   A. SURFACE MOUNTED 1206'S ARE 1/8W, 5% TOLERANCE, 0805'S ARE 1/10W, 5% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
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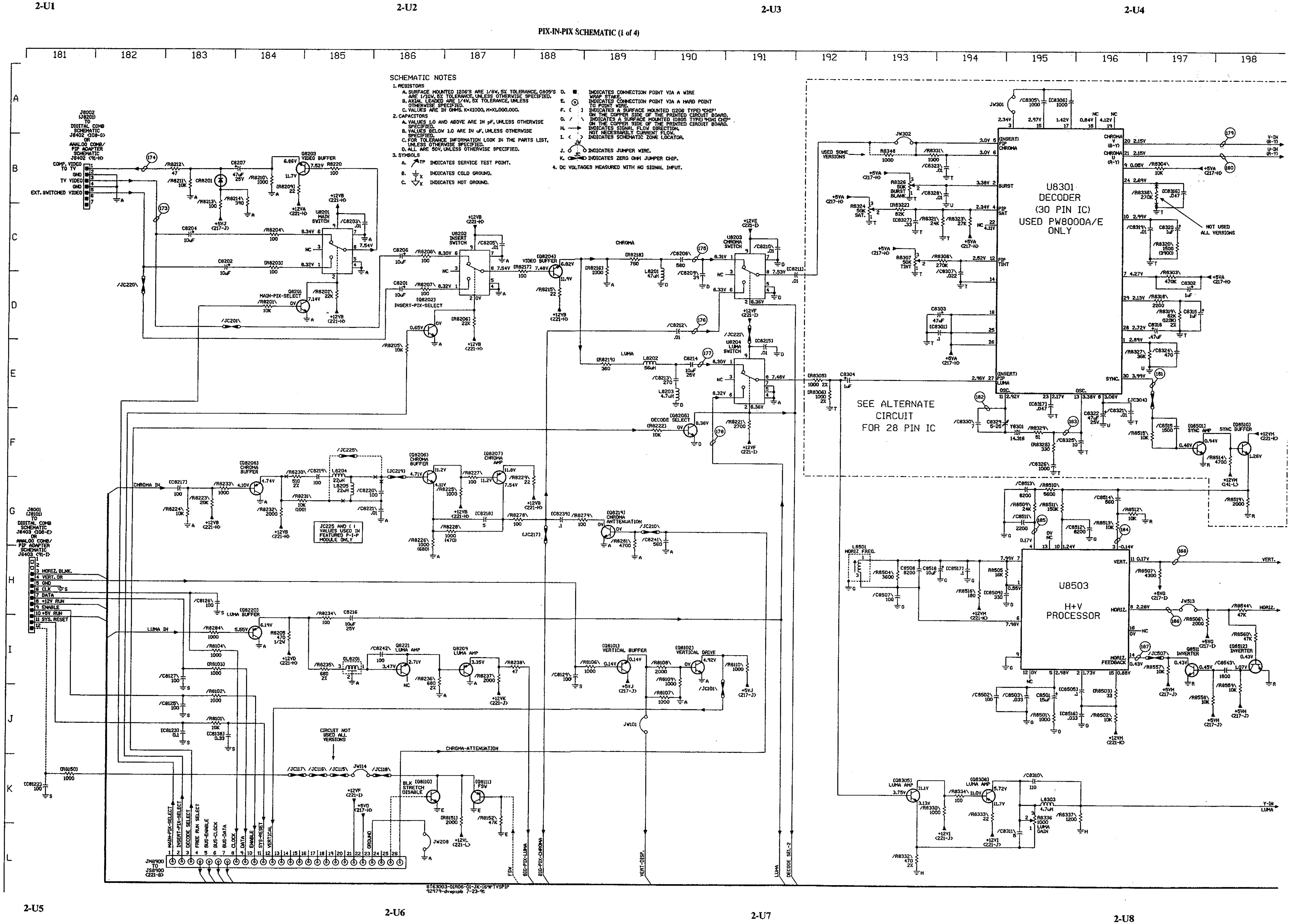
PIX-IN-PIX SCHEMATIC (1 of 4)


2-U1
2-U2
2-U3
2-U4
2-U5
2-U6
2-U7
2-U8
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184
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198
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C
D
E
F
G
H
I
J
K
L
J8002 (J8201) TO DIGITAL COMB SCHEMATIC J8402 <108-G> OR ANALOG COMB/ PIP ADAPTER SCHEMATIC J8402 <41-H>
COMP. VIDEO TO TV
GND
TV VIDEO
GND
EXT. SWITCHED VIDEO
Q8203 VIDEO BUFFER
U8201 MAIN SWITCH
Q8201 MAIN-PIX-SELECT
U8202 INSERT SWITCH
Q8202 INSERT-PIX-SELECT
Q8204 VIDEO BUFFER
CHROMA
LUMA
U8203 CHROMA SWITCH
U8204 LUMA SWITCH
Q8205 DECODE SELECT
SEE ALTERNATE CIRCUIT FOR 28 PIN IC
U8301 DECODER (30 PIN IC) USED PW8000A/E ONLY
USED SOME VERSIONS
NOT USED ALL VERSIONS
BURST
SAT.
TINT
Q8501 SYNC AMP
Q8510 SYNC BUFFER
U8503 H+V PROCESSOR
L8501 HORIZ. FREQ.
VERT.
HORIZ.
HORIZ. FEEDBACK
Q8511 INVERTER
Q8512 INVERTER
Q8305 LUMA AMP
Q8306 LUMA AMP
LUMA GAIN
Y-IN LUMA
V-IN (B-Y)
U-IN (R-Y)
Q8206 CHROMA BUFFER
Q8207 CHROMA AMP
Q8214 CHROMA ATTENUATION
JC225 AND ( ) VALUES USED IN FEATURED P-I-P MODULE ONLY
CHROMA IN
LUMA IN
Q8220 LUMA BUFFER
Q8221 LUMA AMP
Q8209 LUMA AMP
Q8101 VERTICAL BUFFER
Q8102 VERTICAL DRIVE
J8001 (J8101) TO DIGITAL COMB SCHEMATIC J8403 <108-E> OR ANALOG COMB/ PIP ADAPTER SCHEMATIC J8403 <41-J>
HORIZ. BLNK.
VERT. DR
GND
CLK
DATA
+12V RUN
ENABLE
+5V RUN
SYS. RESET
CIRCUIT NOT USED ALL VERSIONS
CHROMA-ATTENUATION
Q8110 BLK STRETCH DISABLE
Q8111 FSW
JW8900 TO J58900 <221-B>
MAIN-PIX-SELECT
INSERT-PIX-SELECT
DECODE SELECT
FREE RUN SELECT
BUS-ENABLE
BUS-CLOCK
BUS-DATA
CLOCK
DATA
ENABLE
SYS-RESET
VERTICAL
GROUND
FSW
BIG-PIX-LUMA
BIG-PIX-CHROMA
VERT-DISP.
LUMA
DECODE SEL-2
ET63003-01R06-01-JX-169PTVSPIP
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SCHEMATIC NOTES

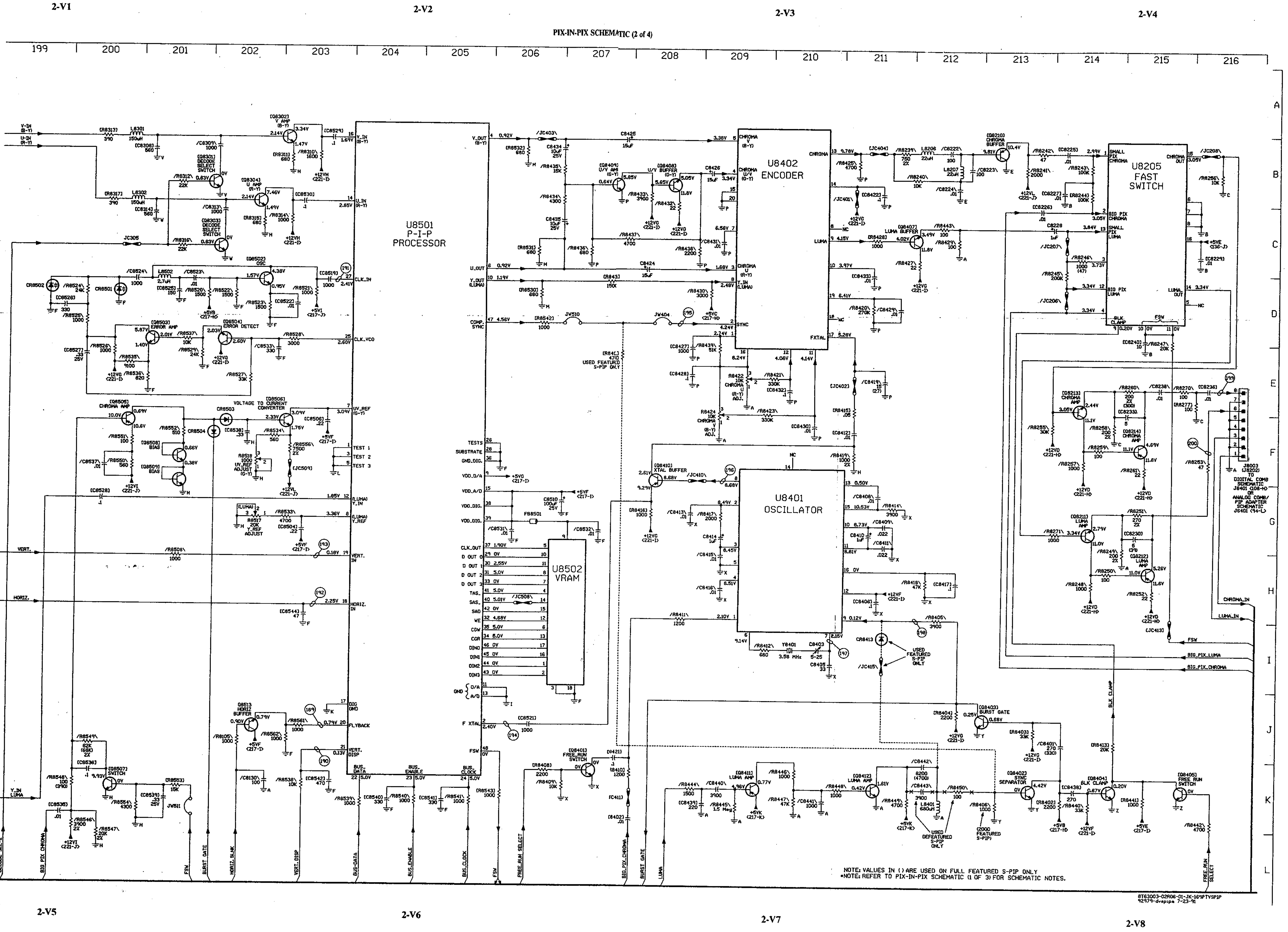
1. RESISTORS
   - A. SURFACE MOUNTED 1206'S ARE 1/8W, 5% TOLERANCE, 0805'S ARE 1/10W, 5% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
   - B. AXIAL LEADED ARE 1/4W, 5% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
   - C. VALUES ARE IN OHMS. K=X1000, M=X1,000,000.
2. CAPACITORS
   - A. VALUES 1.0 AND ABOVE ARE IN pF, UNLESS OTHERWISE SPECIFIED.
   - B. VALUES BELOW 1.0 ARE IN uF, UNLESS OTHERWISE SPECIFIED.
   - C. FOR TOLERANCE INFORMATION LOOK IN THE PARTS LIST, UNLESS OTHERWISE SPECIFIED.
   - D. ALL ARE 50V, UNLESS OTHERWISE SPECIFIED.
3. SYMBOLS
   - A. ↗TP INDICATES SERVICE TEST POINT.
   - B. ⏚X INDICATES COLD GROUND.
   - C. ▽X INDICATES HOT GROUND.
   - D. ■ INDICATES CONNECTION POINT VIA A WIRE WRAP STAKE.
   - E. ◎ INDICATES CONNECTION POINT VIA A HARD POINT TO POINT WIRE.
   - F. [ ] INDICATES A SURFACE MOUNTED (1206 TYPE) "CHIP" ON THE COPPER SIDE OF THE PRINTED CIRCUIT BOARD.
   - G. / \ INDICATES A SURFACE MOUNTED (0805 TYPE) "MINI CHIP" ON THE COPPER SIDE OF THE PRINTED CIRCUIT BOARD.
   - H. → INDICATES SIGNAL FLOW DIRECTION, NOT NECESSARILY CURRENT FLOW.
   - I. < > INDICATES SCHEMATIC ZONE LOCATOR.
   - J. JW INDICATES JUMPER WIRE.
   - K. JC INDICATES ZERO OHM JUMPER CHIP.
4. DC VOLTAGES MEASURED WITH NO SIGNAL INPUT.

PIX-IN-PIX SCHEMATIC (2 of 4)

ALL INTEGRATED CIRCUITS AND MANY OTHER SEMICONDUCTORS ARE ELECTROSTATICALLY SENSITIVE AND REQUIRE SPECIAL HANDLING TECHNIQUES DESCRIBED UNDER "ELECTROSTATICALLY SENSITIVE (ES) DEVICES" IN THE SAFETY AND SERVICING PRECAUTIONS PUBLICATION.

CALLOUTS NEXT TO WIRING PLUGS INDICATE CONNECTIONS TO OTHER SCHEMATICS.

PRODUCT SAFETY NOTE
COMPONENTS WITH A (*) HAVE SPECIAL CHARACTERISTICS IMPORTANT TO SAFETY. BEFORE REPLACING ANY OF THESE COMPONENTS READ CAREFULLY THE PRODUCT SAFETY NOTICE IN THIS SERVICE DATA. DO NOT DEGRADE THE SAFETY OF THE SET THROUGH IMPROPER SERVICING.


2-V1
2-V2
2-V3
2-V4
2-V5
2-V6
2-V7
2-V8
199
200
201
202
203
204
205
206
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A
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I
J
K
L
U8501
P-I-P
PROCESSOR
U8502
VRAM
U8402
ENCODER
U8401
OSCILLATOR
U8205
FAST
SWITCH
V-IN (B-Y)
U-IN (R-Y)
VERT.
HORIZ.
Y-IN LUMA
DECODE SEL-2
BIG PIX CHROMA
FSW
BURST GATE
HORIZ. BLNK
VERT. DISP
BUS-DATA
BUS ENABLE
BUS CLOCK
FREE RUN SELECT
BIG PIX CHROMA
LUMA
BIG PIX LUMA
CHROMA_IN
LUMA_IN
BLK CLAMP
Q8302 V AMP (B-Y)
Q8301 DECODE SELECT SWITCH
Q8304 U AMP (R-Y)
Q8303 DECODE SELECT SWITCH
Q8502 OSC
Q8503 ERROR AMP
Q8504 ERROR DETECT
Q8505 CHROMA AMP
Q8506 VOLTAGE TO CURRENT CONVERTER
Q8508 BIAS
Q8509 BIAS
Q8513 HORIZ BUFFER
Q8507 SWITCH
Q8409 U/V AMP (G-Y)
Q8408 U/V BUFFER (G-Y)
Q8410 XTAL BUFFER
Q8401 FREE RUN SWITCH
Q8411 LUMA AMP
Q8412 LUMA AMP
Q8403 BURST GATE
Q8402 SYNC SEPARATOR
Q8404 BLK CLAMP
Q8405 FREE RUN SWITCH
Q8407 LUMA BUFFER
Q8210 CHROMA BUFFER
Q8213 CHROMA AMP
Q8214 CHROMA AMP
Q8211 LUMA AMP
Q8212 LUMA AMP
R8517 UV_REF ADJUST
R8518 UV_REF ADJUST (G-Y)
R8422 CHROMA (R-Y) ADJ.
R8424 CHROMA (B-Y) ADJ.
Y8401 3.58 MHz
USED FEATURED S-PIP ONLY
USED DEFEATURED S-PIP ONLY
(2000 FEATURED S-PIP)
J8003 (J8202) TO DIGITAL COMB SCHEMATIC J8401 (216-H) OR ANALOG COMB/ PIP ADAPTER SCHEMATIC J8401 (94-L)

NOTE: VALUES IN ( ) ARE USED ON FULL FEATURED S-PIP ONLY
*NOTE: REFER TO PIX-IN-PIX SCHEMATIC (1 OF 3) FOR SCHEMATIC NOTES.

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